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ABSTRACT

Six units are presented for the study of applied Latin linguistics, in a course designed for elementary and secondary school teachers. The units cover the following topics: (1) notes on structural linguistics, the phoneme, Latin phonemes, and phonemic transcriptions; (2) the morpheme, identification of morphemes, morphs, allomorphs, and Latin morphemes; (3) first declension nouns, nominal inflections, and adjectives and adverbs; (4) morphophonemics, order of morphemes, the Latin verb, and the structure of Latin verbs; (5) syntactic devices in Latin, word order, and function words; and (6) lexicon and word structure in Latin. Exercise sheets and masters for charts and diagrams to be handed out in class are included in each unit. (JB)

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A SYLLABUS FOR AN INSERVICE COURSE IN APPLIED LATIN LINGUISTICS

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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PREFACE TO REVISED EDITION

A Syllabus for an Inservice Course in Applied Latin Linguistics by Douglas Mitchell, Ph.D. is a concise and highly dense monograph which puts forth an introductory structural description of the Latin language. The amount of material covered in the course is well divided into six sessions, all of which consume a full four hour class each. The material covers the fundamental concepts and tools of descriptive linguistics and offers to course participants a general introduction to this modern social science as well as a new and creative way of examining an ancient language. In preparing the revised edition of the text, I have deleted no portion of the original syllabus, nor have I introduced any additional problems. What I have attempted to do is to clarify certain points of presentation and to add information which I hope will elucidate some of the more difficult concepts of phonology and morphology. These addenda are made primarily as a result of having taught this course in August, 1972 in a pilot project which was sponsored jointly by the Classics Department of the University of Texas at Austin and the Texas Education Agency. Because of the density of the material, I urge any future instructor of this course to become as familiar as possible with the workings of descriptive and historical linguistics so that he will be able to complement the syllabus at various points and to illustrate various principles which are contained in the course.

In recent years, elementary language teaching, both of English and foreign languages, has experienced an important shift in presentation away from a traditional methodology (with origins in the Middle Ages) toward an approach that was in keeping with the discoveries of modern linguistic science. The teacher of Latin in high school and freshman university courses has therefore found himself often faced with a burgeoning number of new textbooks that present the Latin language in ways radically different from the way in which the teacher himself first learned Latin. It is the double aim of this syllabus to introduce and familiarize these instructors with the terms and principles of linguistics which are becoming increasingly pervasive, as well as to improve upon the actual pedagogical methods which they will employ in their classrooms. It must be strongly pointed out at this time, and the instructor of the present course will find it necessary to reiterate it frequently, that the material covered here is not meant to be handed over directly to young students. As a matter of fact, one should approach this course with minimum consideration of how to formulate to high school students what is learned. For it seems to me that the purpose of this course is to give to someone who already knows Latin a new and intensive look at its internal structure. In this sense, I believe it to be analagous, for example, to a graduate seminar in cell physiology for the instructor of introductory biology. In both cases, the instructor will perhaps be most affected by the mistakes which he does not make, by the out-of-focus presentations which he avoids at the elementary level of instruction as a result of his own sharper insight into the finer features of his discipline.

To the instructor of this course, I would like to offer several suggestions. I strongly recommend that he become as familiar as possible with H. A. Gleason's An Introduction to Descriptive Linguistics. I know that the author of the syllabus is himself a descriptivist and is greatly indebted to Mr. Gleason for many of the approaches contained here. The 1961 edition of O'Brien and Twombly's A Basic Course in Latin also provides much valuable information which should be utilized in this course.

On a more practical level, I suggest that the instructor pull out of the syllabus the following pages, so that he can distribute them readily during the course of his presentation as exercise sheets to be worked during class: pages 9-10; 17-18; 21-23; 30; 46; 51-53; 57-59; 67-74; 81; 93-94; 115. At the end of each session, the instructor should then distribute that part of the syllabus which has been covered in the session. He must point out to those in the class that various pages of the syllabus will be missing, e.g., page 5, because these contain information for the instructor's use.

Finally, I should like to express my deep gratitude to Mr. Bobby W. LaBouve of the Texas Education Agency for having entrusted me with the task of teaching and revising this course; to E. Douglas Mitchell, my friend and teacher for many years; and to Dr. Edgar Polome of the University of Texas at Austin for having so kindly reviewed and criticized my work.

H.P.E.
Austin, 1974

P R E F A C E

During the past decade foreign language instruction has seen a shift of emphasis from a reading-literature approach to that of development of proficiency in the four language skills: listening, speaking, reading, and writing.

Although there are teachers who have studied linguistics, either in summer institutes or in regular college courses, there are still many who feel the need of a practical course in applied linguistics. It is for these teachers that the Foreign Language Section of the Texas Education Agency has contracted the services of outstanding linguists in French, German, Latin, and Spanish to develop the syllabi in each of the languages. This syllabus will serve as the instructor's manual for each of the courses to be offered to elementary and secondary teachers throughout the State.

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SESSION I

Topic	Page	Minutes Needed	Materials Needed	Materials for Distribution
A. Notes on structural linguistics	2	20		
B. The phoneme	5	50		Inventory of English Phonemes
Rest		10		
C. The phonemes of Latin	11		Visuals IA, IB, IC	Summary of Latin Consonant and Vowel Phonemes
1. Consonants		50		
Rest		10		
2. Vowels		40		
D. Phonemic transcriptions	19		Visuals ID, IE	Transcriptions (exercise)
1. Instructor's presentation		20		
2. Participants' transcription		30		
E. Assignment sheet	24	10		Lectures from Session I

A. NOTES ON STRUCTURAL LINGUISTICS

This syllabus is not to be regarded as a concise survey of the structure of Latin grammar. Such would be of little value in itself and unrelated to our aim here.

The purpose of these sessions is to present to teachers of Latin some of the basic concepts and techniques of descriptive and structural linguistics. Perhaps this will result in an improved approach to the teaching of Latin and an increased interest in the learning of Latin.

Insofar as both Latin and the study of Latin have been around considerably longer than linguistics, structural or otherwise, it is perhaps fitting that some comments be made surveying the history and development of the discipline of linguistics and that some cogent defense be made for the utilization of its techniques in Latin studies.

The term structural does not so much refer to a revolutionary and superimposed method, in terms of which language is to be viewed, as it does to a way in which our observations about language can be more usefully and economically arranged than they had been earlier. That is to say, a structural analysis of any given language is a shorthand method of describing and organizing the results of our inquiry into that language's component parts.

Nor is structural linguistics some kind of a modern Minerva sprung full bloom from the busy and superior minds of American linguists alone. Rather, it is a recent development in an ancient discipline. Plato's dialogue The Cratylus and the formulations of Latin grammar by the ancient Stoics are but two of the many examples of classical antiquity which demonstrate an early concern with the origins and structure of language, and the relationship between language and the corresponding externalia with which it is associated. Philosophizing about language, its origin, production and use has a history as old as recorded man. And in some sense or another men have always thought themselves to be dealing with the structure of language, either some particular language or language in general.

Perhaps the distinguishing characteristic of the structuralist is the objective isolation of his tools--this even more than the results of his investigations--for it is in the development and consistent use of certain conceptual tools that the structural linguist has made his progress. Moreover, it has been in the application of these tools to the related disciplines of anthropology and sociology that the objectivity of the tools has been forcibly demonstrated.

Strangely enough, a useful application of these tools in the instruction of foreign languages has not been overwhelmingly widespread. In fact, the format of so-called structural approaches to language, a thing that should be more economical and immediate than a traditional approach, has

most frequently had a girth that has done little to encourage any initial interest.

What we want to become acquainted with in these sessions, then, are the conceptual tools developed within the relatively young discipline of descriptive linguistics. Not only the tools, but also an economical formulation of our observations will be our chief concern. This in turn will lead to a number of suggestions which bear directly on pedagogical application.

Let us look briefly at an example: Many of us learned in school that the English verb to love was to be mastered in the following form:

I love	we love
you love	you love
he, she, it loves	they love

This paradigm was not clearly modeled on the Latin forms that follow:

amō	amāmus
amās	amātis
amat	amant

The Latin paradigm has been used here as a description of the English verb. This approach had been inherited to some extent from the entire tradition of Western culture since the time of Rome and the study of Latin in the Middle Ages. Little changed during the nineteenth century, the century of the discovery and great development of historical and comparative linguistic studies.

About 40 years ago, however, linguists--then still called philologists--began to feel that the Latin form was not a useful description of an English verb. Their criticisms were not, of course, restricted to English verbs. Phonology, morphology, syntax, the entire descriptive techniques of language, were given a new impetus by a group of linguists, headed by Leonard Bloomfield and Edward Sapir, who began to look at language as a complex of structural systems.

These linguists--structuralists--felt that the presentation of the English verb examined above was typical of the kind of victimizing that English and other languages had undergone through the superimposition of Latin models on languages that were vastly different in structure from Latin. (The great number of cognate words in English and Latin had long caused teachers of both Latin and English to insist heavily and wrongly on the great similarity of English and Latin. This error was in large measure due to their ignorance of the importance of the historical phenomenon in which a Germanic tongue, Anglo-Saxon, had adopted many lexical items from Norman French, itself a language derived principally from Latin. However, the structures of Old English--phonological, morphological, and syntactic--remained almost entirely Germanic.) These linguists felt that the English verb, just to take one example, should be learned and explained according to its structure and use within the English language,

not in reference to some comparative study of English and Latin nor to the way it might be used to translate certain Latin patterns.

As an economical statement of the above, these structuralists could make a formulation something like this: All persons of the English verb love in the present indicative tense are the same as the infinitive, except the third person singular. The third person singular adds an s to the infinitive form.

It is obvious that each of the methods, the traditional and the structural, has something to commend itself. The older one does certainly offer a drawn-out explication and description of the English verb. And it is not altogether a false one. The six forms listed are the ones we actually do use in the language.

But the second method certainly gives a more succinct and intellectual formulation of how the language is operating within itself. This is the contribution of descriptive and applied linguistics: It can show how the language works, rather than just give a listing of sample forms and paradigms. It gives a set of formulations and statements about the language, not just a presentation of it. And it is precisely these formulations and the use of the tools that have led to the formulations, that can--if properly stated--be a most economical and useful short-cut to the teaching and learning of foreign languages. This is what is meant by applied linguistics. It is the application of the well-defined tools of the descriptivists to the sounds and grammar of a particular language.

This is, perhaps, the place to mention schools of linguistics other than structural, such as those of the generative grammarians. The single most forceful argument against making use of the techniques of the generative grammarians is that, before one can set up their formulations about a particular language, a student must already know the language. This obviously is not consonant with our situation or aim.

One last point must be made somewhere: The tools of descriptive and structural linguistics, though accurate and objective, are nevertheless quite limited unless they are utilized in the presentation of material that is interesting to students. Far too many of the texts which are to some extent constructed with structural principles in mind present a frighteningly dull kind of material to students. Though this problem is not directly related to the material covered by this syllabus, it is nevertheless a problem which will have a direct relationship to the effectiveness of the techniques described here.

B. THE PHONEME

NOTES TO INSTRUCTOR

1. The presentation of the lecture should be very slow. Participants should take careful notes.

2. All examples cited in the presentation should be written on the board.

   The written examples should be discussed to acquaint class members with nomenclature and signs.

3. All new terms and signs should, at the end of the lecture, be listed on the board along with a final rehearsal of the descriptive tools; e.g.,

   phoneme
   allophone
   complementary distribution
   / / = phoneme
   [ ] = phonetic transcription; allophonic
   < > = grapheme
   { } = morphemic transcription; morpheme

4. Distribute the chart which lists an inventory of english phonemes.

B. THE PHONEME

As in any science, one of the great difficulties is that of immediately trying to define basic concepts in a full and comprehensive manner. Certainly linguistics shares this difficulty, though probably less painfully than the other social sciences.

The burden is less because of the concept of the phoneme. The phoneme is the most fundamental concept of structural linguistics. It will be our task during this first session to gain some practical working knowledge of the phoneme--this more than a precise definition.

Let us take an example: To the native speaker the second sound (letter) of the English word spit is the sound (letter) p. The native speaker will further insist--and in some sense correctly--that this sound is the same sound as the one that begins the word pit or that ends the word top. Yet there is good evidence, from articulatory phonetics (the way the sounds are made), or from acoustic phonetics (the sound spectogram) that these are quite distinct sounds.

The structuralist describes the above situation in this fashion: /p/ (to be read "phoneme p") is a class of sounds, phonetically similar, the members of which occur in different positions within a word. (This is known as complementary distribution.) The slant lines are traditionally used to enclose a letter, representing a class of sounds--a phoneme--the members of which are kept distinct because of complementary distribution.

To define the phoneme in this abstract way as a class of sounds is analogous to a definition of language as a psychological phenomenon, i.e., language is not the words that speaker A says to speaker B. Rather, language is the psychological construction shared by both A and B which allows the sounds of A's articulatory organs to communicate conceptual meanings to speaker B. Language is, therefore, no specific articulated sound, nor is /p/ any specific, particular example. We do not hear phonemes; we hear allophonic variations or members which belong to this class.

Another kind of arbitrary signal is used to indicate the actual phonetic sounds of words; square brackets, [ ], are used to indicate phonetic transcriptions. Thus the p of spit might be written [p^{-}], as opposed to the p in pit, which would be written [p^{h}]. The mark above the first p indicates that no aspiration is used in its phonetic articulation; the h above the p in pit indicates that in initial position p in English is always aspirated. These two sounds, however, are members of the same phoneme (class of sounds) because [p^{h}] and [p^{-}] are not interchangeable in the sense that one will ever appear in the same position as where the other appears. Such complementary sounds are referred to as allophones of the same phoneme.

The sounds [p⁻] and [pʰ] are not interchangeable in the sense that say the p in pill and the b in bill are interchangeable. That is, the p and b of these two words appear in the same initial position. They are not in complementary distribution. We must, therefore, conclude that these two sounds p and b are taken from two different phonemes--again two distinct classes of sounds, each class (phoneme) having its own set of allophones.

From even the limited discussion above it becomes apparent that the real function of the phoneme to the learner of a language is to keep words apart. The word pill is kept distinct from the word bill only because the native speaker--or any other user of the language--assigns the initial sound of each of the words to a different phoneme. Should someone, native speaker or otherwise, pronounce the word pill with an unaspirated initial p, producing something like [p⁻il], no native speaker would be long confused in thinking that the speaker was trying to identify bill or kill or fill or any other word that begins with a different phoneme. He would assume--unconsciously--that the speaker had made a mistake in trying to pronounce [pʰil]; that is, in trying to pronounce the word pill with its customary aspirated p in initial position.

Let us recapitulate: [p⁻] and [pʰ] though phonetically similar are yet phonetically distinct. This is one of the requirements for belonging to the same phoneme. Further, they are not interchangeable, in that each occurs only in certain positions in a word. They are allophones, showing a definite pattern of complementary distribution--the chief requirement of the class of phonetic sounds that constitute a particular phoneme. And remember that allophonic variations will not separate two different words, i.e., [pʰil] and [p⁻il] are not distinguished on the basis of meaning. We hear the phonetic, or allophonic, distinction, but this does not point to a corresponding difference at the level of content. We note that /p/ and /b/ are also phonetically distinct; they are also somewhat similar phonetically, though less so than the two above. What keeps them from belonging to the same phoneme? Why are they not simply allophones of the same phoneme? The answer is that they do not appear with the required complementary distribution. Each may appear in a word wherever the other may appear; e.g., pill bill, pat bat, tap tab. Very often two words are kept apart only on the basis of the distinction of the appearance of /p/ or /b/. This is never the case with the appearance of [p⁻] and [pʰ]. Phonemes are used to keep words apart.

Another tool of the structuralist emerges from an observation of the examples used above. Such pairs of words, contrasting in terms of only one phoneme, are called minimal pairs. Collecting minimal pairs of contrasting words is the quickest way of assembling the phonemes of any particular language.

This can be done for the vowels as well as for the consonants. For example, pat, pit, pet all differ only in terms of a single vowel between the same set of consonants. These different vowels are not found in complementary distribution; that is, they all occur in the same position and are therefore distinct phonemes.

It should be noted here that, theoretically, each phoneme is a class of sounds, not a single phonetic unit, even if the class has a restricted membership. It should also be noted that there is no such thing for example as the phoneme /p/ in and of itself, but only in terms of a particular language. This means that the /p/ of English is not the same structuring element as is the /p/ of French.

English /p/ sets up relationships with the other phonemes of English which are different from the relationships that the French phoneme /p/ sets up with the other phonemes of French. It is these private and particular relationships between the individual phonemes and the larger units constructed out of those which occasion the structure of every language to be the unique kind of thing it is. It is the difference of structure, from the phonological level on up, that makes languages different, not the obvious disparity of the vocabulary items.

Phonemes then are not physical realities, nor are they acoustical realities. They are, rather, abstractions in terms of which we group and categorize whatever acoustical material we are presented with. All our early language training in childhood is spent trying to master the phonemic system of our native language, in order to keep utterances apart. This is the way we identify things and words, by keeping them apart and separate; and this is effected by sorting out what we hear and putting it into the appropriate phonemic categories which the people around us use.

INVENTORY OF ENGLISH PHONEMES

I. 24 Consonants

		Bilabial	Labio-Dental	Dental	Alveolar	Alveo-Palatal	Velar	Glottal
Stops	-	p			t		k	
	+	b			d		g	
Affricates	-					č		
	+					ǰ		
Fricatives: Slit	-		f	θ				h
	+		v	ð				
Fricatives: Groove	-				s	š		
	+				z	ž		
Lateral	+				l			
Nasals	+	m			n		ŋ	
Semivowels	+	w			r	y		

The three basic consonant phonemic types are:

1. Stops: Produced by complete closure at some point in the articulatory apparatus.

2. Fricatives: Produced by a friction-producing constriction in the articulation rather than by a complete closure. A lateral fricative has the opening on one side of the mouth--or both--but contains a closure at mid-line.

3. Nasals: Sounds in which the only function of the mouth and nose is to modify the sound already produced in the larynx, i.e., there is no constriction in the mouth.

II. 9 Vowels

	Front	Central	Back
High	i (bit)	ɨ (Dallas)	u (put)
Mid	e (gem)	ə (but)	o (oh!)
Low	æ (have)	a (hot)	ɔ (ought)

III. 3 semivowels (glides) /y w h/

IV. 1 open transition /+/, e.g. blackbird and black + bird.

V. 4 stresses /ˈ ˆ ˇ ˘/

VI. 4 pitch levels /1 2 3 4/

VII. 3 clause terminals /↘ ↗ →/

If we eliminate the duplication of the listing of /y/ and /w/, we arrive at a total of 46 phonemes for English.

C. THE PHONEMES OF LATIN

NOTES TO INSTRUCTOR

1. All examples and new terms should be written on the board.

2. Participants should copy each of the phonemes that the instructor writes with whatever notes may be required to tell how each phoneme may be identified or defined.

3. Note the kind of lines that indicate graphemes: < >

C. THE PHONEMES OF LATIN

All that was said about phonemes in Section B was based upon an observation of spoken language. It was only because we were native speakers of English that we were able to recognize and comprehend so quickly what constituted a phoneme from the examples we looked at.

There are, of course, no native speakers of Latin. Nor is there any cogent reason for assuming that the pronunciation of Latin which the modern Italians use has any phonemically closer relationship to the phonemic system of ancient Latin than does the pronunciation of Latin to that which the French, the Germans, or the English have evolved. In short, our approach to a survey of what constituted the phonemes of classical Latin will have to be based on written forms of the language.

Such a basis is by no means haphazard, however. Antiquity itself affords no dearth of treatises on Latin sounds. In addition to writers such as Cicero, Quintilian, and Plautus from the classical period, we have the great grammarians from the early Middle Ages, all of whom afford reliable material on the pronunciation of classical Latin. From the modern period we have the results of rhyme studies and comparative linguistics to give us much reliable information on the subject. There is also a valuable source of insight regarding the pronunciation of classical Latin that has been derived from loan words coming into Latin from languages whose phonemic systems we have precise information on, as well as the reverse--loan words from Latin into languages whose phonemic systems are known to us.

Technically speaking, one is dealing with phonemes only when one is dealing with the sounds (phones) of a language. The written units corresponding to sound formations are called graphemes. However, considering the amount of scholarly material, both ancient and modern, that we have pertaining to the pronunciation of classical Latin, it is no insurmountable problem to go from the graphemic representation to the phonemes of the language.

The comparative ease with which this can be done in Latin is to a large extent the result of the almost phonemic spelling system of classical Latin. A phonemic spelling system indicates that there is a one-to-one correspondence between the phonemic system of the language and its orthographical representation. Such systems are rare indeed, but Latin actually is not too far from this ideal.

One need only compare the fearful discrepancies in either modern French or modern English between the phonemic system and the orthography. Compare the written English work tough with its phonemic transcription /təf/, where there is only one corresponding shape between the one and the other. This, however, is fairly tame compared to the almost ridiculous situation obtaining in the French word oiseau (bird), which would have /wazo/ as its phonemic transcription, and in which no single shape corresponds to the written form. Again, Latin is happily far from this kind of problem.

During the classical period the Latin alphabet had 21 graphemes (signs, letters). Later, the upsilon and zeta were borrowed from Greek, giving a total of 23. These were: a b c d e f g h i k l m n o p q r s t u x y z. The letter k was used only in foreign words, and q stood for k before a w sound. The consonant clusters ph and th were transliterations from Greek and were pronounced as simple p and t, and x was a double consonant standing for ks.

LATIN CONSONANTS

Phoneme	Phone	Grapheme	Example
/p/	as in English pill, without aspiration, or the p in top.	<p>	puer
		<b> before s and t	urbs, obtineō
		<ph>	pharetra
/t/	as in English unaspirated t in pat.	<t>	timet
		<th>	theātrum
/k/	as final ck in English pick; no aspiration	<c>	capit
		<ch>	pulcher
		<k>	Kalendae
		<q> before <u>	quaerit
/b/	as in English bill	<b>	ibi
/d/	as in English did	<d>	dūcit
/g/	as in English go	<g>	agit
/f/	as in English fill	<f>	ferit
/s/	as in English unvoiced s in see	<s>	senex
/h/	as in English hit	<h>	hic
/l/	as in English lift, but with tongue away from teeth more.	<l>	pellitur
/m/	as in English mine	<m>	patrem
/ŋ/	as in English ng of sung	<n> before <c> and <g>	nunc angor
/n/	as in English tin, but more dental	<n>	nihil
/w/*	as in English win	<v>	
		<u> before a vowel	vidit cui

*also listed under vowel phonemes as the last elements of diphthongs.

Phoneme	Phone	Grapheme	Example
/r/	trilled	<r>	Rōma
/y/*	as in English yell	<i> before a vowel	iaciō
/z/	as in English zone	<z>	zōna

The only real problem concerning the vowel phonemes of Latin is the question of vowel length. Vowel length is phonemic in Latin, i.e., it is a means of contrasting words. (Consonant length is also phonemic in Latin, and this is always represented as double consonants; e.g., sumus and summus.) This means that sometimes--quite often, in fact--two Latin words are kept apart solely on the basis of length of a vowel; e.g., puella, 'girl,' as opposed to puellā, 'by a girl.'

The only difference between the two forms is that the final vowel of the second form is long, as it always is for the ablative for this declension. Thus, when we say that vowel length in Latin is phonemic, we mean that two utterances are kept apart because one has a short vowel and the other has a long vowel. It is perhaps appropriate here to point out the overwhelming advantage it gives beginning students to insist on their always learning long vowels with every vocabulary item they encounter. Such apparent labor will save them hundreds of hours when they later have to deal with the scansion and reading of Latin poetry, not to mention the increased precision it will lend to their reading aloud of Latin prose.

LATIN VOWELS

Phoneme	Phone	Grapheme	Example
/i/	as in English pin	<i>, <y>	fīnit, Eurydice
/e/	as in English met	<e>	cēdet
/a/	as in the American English o of pot	<a>	fāta
/o/	as in English nor	<o>	cōnor
/u/	as the oo in English foot	<u>	lūdus
/ī/	as in the English word machine	<i> <y>	fīnit Hȳdra
/ē/	as in the English they	<e>	cēdet
/ā/	as in the English ah!	<a>	fāta

*also listed under vowel phonemes as the last elements of diphthongs.

Phoneme	Phone	Grapheme	Example
/ō/	as in English note	<o>	cōnor
/ū/	as in English boot	<u>	lūdus

All the examples cited in Latin show a complete set of contrasting long and short vowels in Latin: fīnit, sĕdet, fāta, cōnor, lūdus.

In addition to the simple long and short vowels listed above, Latin has five diphthongs: ae, oe, au, eu, and ui. Though the diphthongs always have the effect of making the syllable in which they appear in Latin a heavy syllable, they are, from the phonemic point of view, combinations of a short vowel plus a consonant glide (sometimes called a semi-vowel) or the reverse--a consonant glide followed by a short vowel.

In the listings of the consonant phonemes we noted that both/w/ and /y/ were to be also considered among the vowel phonemes. This is because of their ambivalent nature as semi-vowels. For example, the Latin word aequus begins with the diphthong ae, which would be represented phonemically as /ay/ and not as /ai/ as might have been expected. That is to say, the first element of the vowel nucleus of this word is a short vowel followed by the semi-vowel /y/ or at least a movement in that direction rather than in the direction of /i/.

The diphthong au as in auctor shows this same kind of structure: short vowel plus a consonant glide. This time the glide is toward the /w/ rather than toward the /y/. That is, we would phonemically write the word /awktor/.

Thus, the diphthongs can be phonemically described:

LATIN DIPHTHONGS

Diphthong	Example	Phonemic Transcription
ae	aequus	/aykwus/
oe	proelium	/proylium/
au	auctor	/awktor/
eu	seu	/sew/
ui	cui	/kwi/

A rather startling demonstration of the reality of these consonantal glides can be effected by pronouncing words with diphthongs into a tape recorder and then playing them backward. The consonant glides become quite distinct.

Since our reconstructions of Latin phonemes are based totally on written material, there is not enough reliable evidence to make valid conclusions about the phonemic nature of variations in the intonation patterns of Latin.

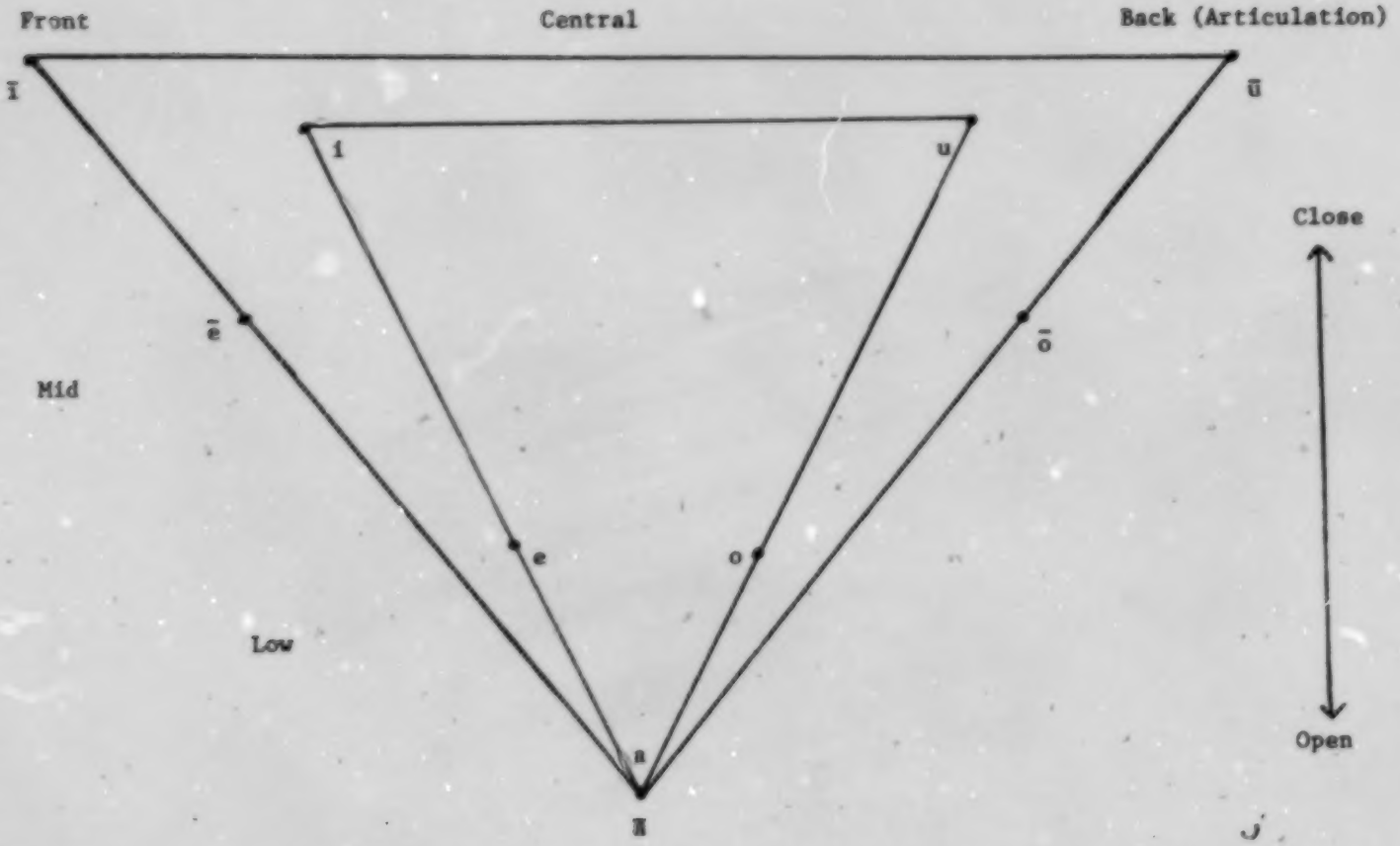
As for stress accentuation, it is perhaps easier to treat it as mechanical, rather than phonemic. Thus, words are not kept apart sheerly on the basis of stress in Latin, as they are in English; compare blackbird as opposed to black bird. It is vowel quantity--and this is phonemic--that occasions where the accent is to fall on a Latin word. It is in this sense that it can be treated mechanically, since it is the phonemic distinction of the long and short vowels, and not where the accent falls that keeps utterances apart.

SUMMARY OF LATIN CONSONANT PHONEMES

	Bilabial		Labiodental		Dental		Alveolar		Palatal		Velar	
	-v	+v	-v	+v	-v	+v	-v	+v	-v	+v	-v	+v
Stops	p	b			t	d					k	g
Fricatives			f				s	z			h	
Nasals		m				n						n
Lateral								l				
Trill								r				
Semiconsonants										y		w

-v: Voiceless
+v: Voiced

SUMMARY OF LATIN VOWEL PHONEMES



D. PHONEMIC TRANSCRIPTIONS

NOTES TO INSTRUCTORS

1. Participants are to write in pencil the phonemic transcriptions directly onto the sheets provided. This should take about 30 minutes.

2. After the participants have finished their transcriptions, the instructor is to write each transcription onto the board, taking each one slowly and referring to the catalogue and description of the phonemes in the previous section whenever confusion arises on the part of the participants.

D. PHONEMIC TRANSCRIPTIONS

In the last section we saw that the graphemes (letters, signs) of Latin can be written in a phonemic system that incorporates more structural information about Latin sounds than the traditional orthography, i. e., a phonemic description better represents the relationships between sounds. This is not to suggest that the traditional orthography be cast aside and that phonemic spellings be instituted in their place. That would separate students even further than they are now from the corpus of Latin literature.

The reason for writing the Latin graphemes into a phonemic system is that we may gain some initial comprehension of the way the Latin language structured its sounds and set up the patterns of relationships among them. It is a first step in organizing formulations about how the Latin language works in terms of its own internal mechanisms.

Now we are going to do a relatively lengthy exercise in the transcribing of traditional Latin words into phonemic representations. Each word is to be put into the phonemic characters that were presented in the previous section, including both consonants and vowels. Remember to include phonemic transcriptions within slanted lines to get accustomed to this useful device for indicating phonemic transcriptions rather than purely phonetic ones, which, though useful for telling how the sounds of a language are produced, do not often give much information about the structure of its sound system.

TRANSCRIPTIONS

Latin Word	Phonemic Transcription
abdūcō	
abdūxī	
aboleō	
abolēvī	
accidō	
accīdō	
Babylōnia	
Boiī	
Boōtēs	
Caesar	
cēteraē	
coniciō	
coniēcī	
dēiciō	
dēiectum	
Deucaliōn	
dubius	
ēdō	
epulārum	
exercitus	
fēlīx	
fax	
facis	

Latin Word	Phonemic Transcription
Gaius	
horridus	
haud	
ille	
īlia	
iūdex	
iūxtā	
lēx	
lēgis	
maiōrēs	
mūrex	
nūmen	
nunc	
Orgetorix	
obstupēscō	
obtestor	
Phōcis	
phalanx	
proelium	
quam	
quō	
rēx	
rēgis	
saepe	
templum	
Thisbē	~~30~~

Latin Word	Phonemic Transcription
urbs	_____
ūva	_____
zōna	_____

E. ASSIGNMENT SHEET

1. Read all lectures from Session I. Note that certain pages of the syllabus are missing, e.g., pages 5, 11, et al. These pages contain information for the instructor.

2. Read Langacker's Language and Its Structure (Harcourt, Brace, and World, Inc.: New York, 1967), pp. 1-66; 141-166.

3. Let the participants make some use in their own classrooms of what they have learned about phonemic structuring, using simple and short words. Practice a short dictation exercise with the class, having them write the dictation in phonemics, including the slant lines.

4. Let the participants have their own students count up and tally the number of Latin phonemes, first consonant and then vowel. The participants should then arrange the phonemes for the students in an order that will be based on the information gained from the reading of Langacker on articulatory phonetics, pp. 141-151. N. B. W. Sidney Allen's Vox Latina (Cambridge University Press: Cambridge, 1965) would be a valuable reference for the teacher in an exercise of this type.

SESSION II

Topic	Page	Minutes Needed	Materials Needed	Materials for Distribution
A. The morpheme	26	50		
Rest		10		
B. Identification of morphemes	29	45		Identification of morphemes (exercise)
Rest		10		
Correction by instructor		30		
C. Morphs, morphemes, and allomorphs	31	45		
Rest		10		
D. Morphemes in Latin	35	40	Visuals IIA, IIB	
E. Assignment Sheet	39	30		Lectures from Session II

A. THE MORPHEME

NOTES TO INSTRUCTOR

1. There can be little speed [illegible] this section. Every example should be written on the board and discussion should ensue as questions arise; otherwise too many will arise at the end, effecting a total lack of cohesion.

2. The instructor should offer other examples of morphemic segmentation, on a very simple level, before the participants proceed to the exercise itself.

3. The following terms are encountered in reading Langacker, pages 141-166, and recur frequently throughout the remainder of the syllabus:

   Morpheme: A short sequence of phonemes which are recurrent; this sequence must have meaning; the morpheme is the smallest unit which is grammatically pertinent. cf. strangeness which is made up of two morphemes

   /streynj/
   /ness/.

   A morpheme may also be defined as a group of one or more allomorphs which conform to certain, usually rather clearly definable, criteria of distribution and meaning.

   Allomorph: A variant of a morpheme which occurs in certain definable environments.

4. Point out continually that the basic structuring of phonology proceeds analogically throughout the rest of the language systems.

A. THE MORPHEME

Suppose for a moment that some ichthyologist discovers a fish that has never before been scientifically identified. He calls it a marn. Now certainly we have never heard this word before, but we can accept it as an English possibility, as opposed say to rnam. Though we do not know our ichthyologist and he does not know us, still we can say with safety that he may not name his new discovery rnam. Nor may he call it a gqlip, though he could--if he wanted to--call it a gulip.

Further, we even know what he would be obliged to call the plural of his marn or his gulip. They would be marns or gulips. But there can be no gqlips or rnams in English, as these are not possible combinations of phonemes in English.

We are not to conclude that our possession of the information above is some built-in knowledge about fish or marine life. Hardly. It has to do, rather, with a native speaker's intuitive grasp of the structure of his language. We could not--unless we knew French or German--say what words the Frenchman or the German might acknowledge as possibilities for the name of the fish in French or German. But they could, just as we can for English.

That is, certain combinations of the 24 consonants, 9 vowels, and 3 semivowels that make up the inventory of the so-called segmental phonemes of English are acceptable; some are not. And native speakers know at once which combinations are acceptable and which are not. In a sense, this information is not really even knowledge about our language. It is more a consequence of a feeling we have for the structuring of the sounds of our language into the production of meaningful units. In other words, marn is a potentially useful unit for English--and perhaps may well be used one day.

It is, therefore, the inventory of the possible combinations of the phonemes of a language e.g., marn, that constitutes its morphemes, since not all possibilities do exist.

Like the phoneme, the morpheme is very difficult to define, and can best be observed and described. On the basis of what we learned in Session I, we would say that the words bill and pill constitute a minimal pair. That is, we find a single phonetic distinction which is sufficient to constitute a difference in meaning between the two words. This sufficient amount of difference on the phonetic level may be called "phonemic"; on the level of morphology we call it a difference of "morpheme." Thus, bill and pill show us not only the minimal phonetic difference, which causes us to set up /p/ and /b/ as distinct phonemes, but the fact that we do this on the basis that pill and bill must be kept apart because they have distinct meanings causes us to decide that we are here dealing with distinct morphemes, or units of meaning.

Morphemes are usually--though not always--relatively short sequences of phonemes which constitute a meaning. Take the word strange. We would write it phonemically as /streynǰ/. This word has a meaning to us as

native speakers. Further, there is no way we can segment the word so as to be left with components that are in any significant way related to the essential meaning of strange.

We might, for example, extract from it stray, phonemically /strey/. And this is, of course, an English word with an acknowledged meaning. But it is a meaning that is not intimately--if at all--related to the one we customarily associate with the word strange. We therefore conclude that strange is not composed of elements that have meanings in themselves, but rather that it is a simple morpheme.

The word strangeness, however, is not a simple morpheme. We see instantly that it consists of the morpheme strange plus the suffix (also a morpheme) '-ness,' which we find to occur in many other English words, such as openness, heaviness, etc. We can say, then, that the word strangeness is composed of two morphemes, strange and '-ness,' neither of which can be further divided.

These observations permit us to further refine our attempt at defining the morpheme. We see that it is the smallest meaningful unit in the structure of a language. In this light, strange is a morpheme, since it cannot be further divided without seriously altering its basic meaning. Just as strangeness consists of two morphemes, neither of which can be further divided without a serious altering of their basic meanings, so it is with pill and bill. Each of these two words is a distinct and simple morpheme, in that neither word can be divided without being reduced to components unrelated to the original meanings of the words. We might, if we were not well versed in English, suspect that the common component '-ill,' occuring in both pill and bill is a suffix and a morpheme, operating much as the suffix '-ness' in the word strangeness. Although it is true that we do have the English word ill, its meaning is not related to either pill or bill. Moreover, all other words in which we find the formation '-ill,' such as sill, fill, etc., turn out to have distinct meanings, all quite unrelated to either pill or bill or to each other or to any kind of meaning that we could assign to '-ill.' We conclude that '-ill' is not a morpheme, though the phonemes of the configuration as it occurs in bill and pill is the same as it appears in the word and morpheme ill. From this observation we can deduce that morphemes are to be identified from their structural patterns, not their phonemic shapes. Two shapes may be written exactly the same phonemically, yet differ in that one may be a morpheme while the other is not.

It must not at this point be assumed that a morpheme is to be identified as a syllable, or even as a certain number of syllables. A morpheme is frequently short, but it may be long. The word go is a morpheme and consists of one syllable. The word Massachusetts is also a simple morpheme, but it has four syllables. The word goes, however, is not a simple morpheme. It can be broken down into the stem 'go-' and the suffix '-s' which we recognize as the marker of the third person singular of the present indicative of the English verb (along with other variations which we shall later consider). Thus goes, though only one syllable, contains two morphemes. We conclude that number of syllables and number of morphemes do not coincide. Again, morphemes are the smallest units of meaning in a language, basic and minimal. It is this characteristic of the morpheme which most facilitates any attempt on our part to isolate and identify morphemes within any given text.

B. IDENTIFICATION OF MORPHEMES

NOTES TO INSTRUCTOR

1. Be sure that you have provided enough examples from the preceding section--along with other improvised examples presented on the board--that the participants know what, at least in general terms, a morpheme is and what they are looking for.

2. After they have finished doing the exercise themselves, the instructor should then write the entire exercise on the board.

3. Point out to the participants as frequently as is necessary that the structural units indicated by the English phonemic system are different from the structural units of the Latin phonemic system.

4. Recall the symbol:

   { } = morpheme; morphemic transcription

B. IDENTIFICATION OF MORPHEMES

Segment the following words into morphemes.

EXAMPLE: calculate calcu-late

Write with lead pencil, so that you may be free to revise your morphemic analysis. Remember to divide every word as much as you can, without producing components that are unrelated to the essential meaning of the word.

anybody . . . . . _____

anthropology . . . . . _____

Riddlesdale . . . . . _____

transferred . . . . . _____

criminal . . . . . _____

hopelessness . . . . . _____

notwithstanding . . . . . _____

works . . . . . _____

Pennsylvania . . . . . _____

C. MORPHS, MORPHEMES AND ALLOMORPHS

NOTES TO INSTRUCTOR

1. The real problem in this section is to get the participants to look at morphemes both structurally and phonemically. The instructor must be at pains to see that it is clear that each allomorph of any particular morpheme is, to be sure, a particular phoneme or combination of phonemes. However, an identical set of phonemes may or may not be related to the same morpheme.

2. Giving numerous further examples on the board of the phonemic representations of the allomorphic variations of the {Z_1} and {Z_2} morphemes will probably be the best tactic to take.

3. Note the terms:

   Morph: Shape, letter; a generic meaning the shape of a sound.

   Allomorph: The contrastive variants which constitute the morpheme.

C. MORPHS, MORPHEMES, AND ALLOMORPHS

We saw in Section A that had our imaginary ichthyologist decided to name his fish a marn, we would have known to call its plural marns, written /marnz/ phonemically. Further, had he decided to name it a gulip, the plural would have been gulips, written /gyuwlips/ phonemically.

Our first opinion as native speakers is, understandably, that both words end in the same sound, or perhaps letter (morph, or shape). We feel that in English we add s to words to form their plurals, even though the phonemic transcriptions of the two words above make it evident that the words end in different phonemes.

We can complicate the issue even more by noting that had the scientist named his fish a tose, then the plural would have been toses, written /towziz/ phonemically. Here too we would, as native speakers feel, that we were dealing with the same final sound (morph or shape) as in the words above, although again the phonemic transcriptions make it apparent that we are meeting yet a third variation of the plural suffix in English.

Fortunately, the three allomorphs listed above constitute almost all possibilities for plural formations in English. (Note that we use the term allomorph in the same structural sense as we did the term allophone. The concepts of '-eme' and 'allo-' are basic to the kind of ordering and arranging that constitute the core of structural linguistics.) To these need be added only the 'en'--written /in/ phonemically--of oxen, children, and brethren; words like sheep and deer which have no plural markers--this we refer to as a zero allomorph--and words like geese and mice, exhibiting a kind of internal change which will be discussed later. But all new words coming into the English language will form plurals from one of the three allomorphs first discussed, not from these latter ones. These particular allomorphs which do form all new plurals in English constitute what is known as a productive subclass; i.e., it is from this class of allomorphs of the plural morpheme that new formations are made, not the others.

Looking at the examples cited above from the point of view of structuralism, we can set up two classificatory systems. The first involves what we may call "phonological conditioning."

From an examination of the words marns, gulips, toses, and words that end in the singular in similar phonemes--such as fid, troc, and hosh, it can be readily seen that the particular shape (morph) which the suffix (plural morpheme) takes is determined by the phoneme with which the word ends in the singular. Just as when we were dealing with phonemes and decided that it was never a particular phoneme which we actually heard, but rather always some particular allophone, so it is with the morpheme. We never actually hear the plural morpheme as such, but rather one of the allomorphs and this almost always from the productive subclass mentioned above.

Thus we find the plural allomorph to take the phonemic shape of /z/ only after voiced sounds, such as marn or fid. (It might be noted here that vowels

are voiced sounds; so this particular allomorph is the one that is used to form plurals of words ending in a vowel.) The allomorph appears as the phoneme /s/ only after voiceless sounds, such as gulip or troc. The third allomorph of this productive subclass appears as /ɨz/ and occurs only after groove fricatives and affricates, /s z š ž č ǰ/. (See Chapter 6 in Langacker.)

When we were learning about the phoneme and its allophones, we saw that we native speakers of English felt the p of pit and the p of spin, as well as the p of top to be all the same "sound," or "letter," although it was evident that each was to be transcribed differently phonetically. To take care of this native feeling for sameness in spite of apparent diversity, we set up the phoneme, as a class of sounds whose allophones appeared in complementary distribution.

In a like manner, we native speakers feel that all plurals of English words end in an s, sometimes with a vowel preceding, in spite of the fact that we see from the transcriptions different phonemes appearing after different preceding sounds. Like the problem with the phoneme, we can solve our problem here by setting up the concept of the morpheme, noting that it has a class of variations which we call allomorphs. It has become traditional among linguists to call this particular morpheme {Z1} read "z-one."

It has also become customary to enclose signs for morphemes within braces so as to distinguish them from both phonemic and phonetic transcriptions.

The plural morpheme of English is referred to as {Z1} so as to distinguish it from {Z2}, which is the morpheme that marks the third person singular present indicative of English verbs, as in cuts, slides, and fishes, phonemically written /kəts/ /slaydz/ /fišɨz/, thus showing the same kind of conditioning of the appearance of the allophone as for {Z1}. This kind of conditioning is called phonological conditioning, because the particular kind of sound found in the suffix (allomorph) is determined by the sound which ends the unsuffixed word.

The second system into which the plurals of English nouns fall is not a phonological system, but rather a morphological one. That is, with the exception of young children or new learners of the language, oxes is not a form that we hear for the plural of ox. The word ox is a morph which has a peculiar plural ending. This particular word carries with it the sigual that we form its plural as oxen. Children and new speakers must learn this relatively soon. Since this particular ending--we can now say allomorph of the morpheme{Z1}--does not follow our earlier rules for the phonological distribution of the allomorphs of {Z1} and since this particular allomorph does not appear in plurals of other English words ending in x, such as axe, we say that this noun plural is morphologically conditioned. That is, its plural form is conditioned by the shape (i.e., a morph) of the singular form ox.

The remaining allomorphs of the {Z1} morpheme of English as those found in such words as goose-geese, mouse-mice, written phonemically /guws/ - /giys/; /maws/ - /mays/, are typical of a class of nouns that, earlier in the history of the language, formed their plurals by regular internal changes of vowels. This is a phenomenon quite common in many languages, such as modern German and Turkish, but no longer an active one in English. The probability of a new word in English, let's say for instance pouse, being given the plural form of pice is rather remote. It is for this reason that we say both this allomorph--internal change of vowel--and the

one above in oxen are morphologically conditioned formations rather than phonologically conditioned formations. Further, we can again note that these two allomorphs are not productive subclasses for English noun plural formations at this point in the history of the language, as opposed to the first set of variations we looked at, /s z ɨz/. All new nouns coming into English form their plurals from the productive subclass consisting of these three allomorphs.

D. MORPHEMES IN LATIN

NOTES TO INSTRUCTOR

1. Additional examples of sentences showing minimal variation between nominative and accusative shapes (morphs) can be introduced.

2. It can be suggested how minimal sentences or combinations of morphs (words) can be used to derive the same structural picture from the samples to give us a similar picture of genitive, dative, and ablative endings.

D. MORPHEMES IN LATIN

One of the first things beginning students of Latin read from their textbook or hear from their instructor about Latin is that Latin is a highly inflected language. This phrase comes to mean more to the student as his work in Latin progresses. In fact, most of what students come to consider the difficulty in learning Latin is its vast morphology; i.e., its inflectional endings.

The English sentence, "The horse kicks the man," is a good sentence in English, if one less likely to occur nowadays than it was half a century ago. Likewise, "The man kicks the horse" is a perfectly good English sentence, grammatically at least. Yet the two sentences, though containing the same words, mean quite different things to us. It is not only that each word within each sentence has its shape and function, but also that the shape of the sentence itself has a function and meaning. In English grammar (morphology), word order is of utmost importance. It makes quite a difference whether it is the man or the horse who is kicked. We derive from the word order itself a certain structural meaning.

We can look at a nonsense sentence and see that this is true. For example, if we say "All hisacs gronch their crombies," we have some definite ideas about what is going on, even though we may not know what a hisac is, nor what one does when he gronches, or where he may rest his crombie at night. What we do know is certain structural information: We know that the subject of the sentence is hisac; we know that gronch is the verb and that crombie (or perhaps cromby) is the direct object, and also a noun. All this information we have from the order of the morphemes (words) and from the structure of the sentence as a whole. As a matter of fact, we can say that anyone who knows this structural information about the language pretty well knows the language; he may be deficient in vocabulary items, but he does know how the language structures experiences for its users and now needs only the aid of a dictionary or someone else to tell him what some particular vocabulary items mean.

Even from this one example, it can be seen that the structure of the language is its core; the vocabulary is the outer layer of language, and its most unimportant--unimportant, insofar as it does not so much determine how the language functions as does, say, its sequential arrangement of morphemes.

In the Latin sentence "Puer āmittit mātrem," the word order is not terribly important. This is not to say that word order in Latin is not a very complicated problem. It is, but there is no order that the above sentence may be arranged in that does not result in generally the same meaning as the one written above. There are stylistic nuances to be derived from variations in Latin word order, but the shape of the word, the morpheme, is practically the only source of signal to what the meaning of the word is or how the word is being used in the sentence. This of

course results from the fact that Latin has a system of inflectional endings. Since word order is of quite limited importance, the shapes (endings, morphemes) that are added to other base shapes (stems, roots) become a matter of great concern to students of Latin.

Let us observe the following exercise in the isolating and identifying of morphemes and formulate what we can concerning Latin morphology from it.

1.	spectat	'she looks at'
2.	puella īnsulam spectat	'the girl looks at the tenement house'
3.	puella īnsulam nōn spectat	'the girl does not look at the tenement house'
4.	spectat īnsulam	'she looks at the tenement house'
5.	īnsula ōrnat viam	'the tenement house adorns the street'
6.	puella viam spectat	'the girl looks at the street'
7.	viam nōn spectat	'she does not see the street'
8.	via īnsulam habet	'the street has a tenement house'
9.	habetne via īnsulam	'does the street have a tenement house'

EXERCISE

A. What is the marker for the subject of the sentence?
Answer: -a.

B. What is the marker for the object of the sentence?
Answer: -m

C. What appears to be the negative?
Answer: nōn

D. What is the marker for the ending of the verb form?
Answer: -t

E. What is the probable meaning of -ne?
Answer: probably an interrogative particle.

F. How are all the nouns found in this exercise usually classified in Latin grammar?
Answer: first declension nouns.

G. What is the probable Latin shape for "She does not have a tenement house"?
Answer: Īnsulam nōn habet.

What has been our mode of procedure in this exercise? We have compared the utterances of Latin to each other and to the English glosses. Let us recapitulate our pattern: If we look at 1, 2, and 4, we can conclude that puella is the word for girl in Latin. (We are assuming here that we do not know Latin--or that the students do not know Latin--and that we are making an analysis from a corpus of a language that is not known to us.) At the same time we can now be sure that īnsulam is tenement house, and in the objective case. But our information is only tentative as yet. As many samples as possible must be studied before one can state his conclusions with any degree of probability. In 5, we note that īnsula has lost its ending, and that, upon becoming subject of a phrase--let's not say sentence yet--it has an ending that looks like the ending of puella. From 8 we can see that the new word of 5 (viam) undergoes the same alteration as īnsulam in becoming subject of the sentence: It loses its final -m.

There are, to be sure, more comparisons that the beginner will probably at first make, then discover they come to nothing and lead nowhere. He will have to start over, trying to follow up comparisons that do yield some structural information.

The exercise above is obviously a highly selected and controlled group of sentences--the kind of situation that probably would not occur if one were collecting material and making an analysis of a language that he actually did not know. It serves, however, to illustrate the kind of observation that can and need be made. It will also serve as something of a model for subsequent exercises and tabulations.

It is, finally, the economy of observation that makes the results of structural inquiry most rewarding. This is not a consequence that is at once obvious, but we can set up some kind of form for what we have learned from this exercise to gain some over-all picture of the situation regarding what we know of nominative and accusative markers of first class nouns of Latin.

Declension Stem Endings	I -A-
Suffixes	Nom -ϕ
	Acc -m

From this chart we can tell that its formulator (some structuralist) has decided that the -a of the nominative is to be considered the last element of the stem and not a suffix. Of the material considered here, only -m of the accusative is a suffix (morpheme). The /m/ is then an allomorph of the morpheme (a class of allomorphs) which indicates the accusative case in Latin. The form of the table above is sufficient to take care of more material as we come to it, and it is the one we shall try to use throughout our exercises in morphology.

E. ASSIGNMENT SHEET

1. Read all lectures from Session II.

2. Read Langacker, pp. 69-96; 167-171.

3. Set up an exercise, such as the sample one given you, which will present possibilities for a structural description of the morphology of genitive, dative, and ablative case nouns of Latin in the first declension.

4. Write out a short explanation of the form we have chosen to represent the stem ending of the declension.

SESSION III -- MORPHOLOGY I

Topic	Page	Minutes Needed	Materials Needed	Materials for Distribution
A. First declension nouns	41	50		
Rest		10		
B. Nouns continued	42	50	Visuals IIIA, IIIB	Exercise
Rest		10		
C. Nominal inflections	48	50	Visuals IIIC, IIID	Exercise, Chart A and Chart B
Rest		10		
D. Adjectives and adverbs	54	50	Visuals IIIE, IIIF	Exercise
E. Assignment sheet	60	10		Examples of morphophonemic changes Lectures from Session III

40

A. FIRST DECLENSION NOUNS

NOTES TO INSTRUCTOR

1. The instructor should find as quickly as possible from one of the participants an especially well-constructed exercise from Session II's assignment and put it on the board with necessary explanations.

2. In recapitulating the thinking that went into the construction of the exercise, special attention should be focused on the comparison of entries. Each conclusion -- about structural elements -- should be stated in terms of definite comparisons, thus avoiding any statements based on nothing more than the participants' knowledge of Latin grammar.

3. All exercises in morphology should be conducted as if the participants knew no Latin, and were dealing with a totally unknown language. Let all statements about structure be based on comparisons of form, environment, and glosses.

4. This first hour of Session III is very important in that it evinces a method quite useful in the classroom in eliciting participation of students in examining structural problems. Properly approached, it can be a far more engaging method than memory drill or the endless repetition of pattern sentences.

B. NOUNS CONTINUED

NOTES TO INSTRUCTOR

1. Even though the tables are included in the text, write them again on the board, taking the entries from the verbal help of the participants.

2. Let the instructor do the exercise included in this section along with the students on the board, taking his entries from their suggestions. This will help them in setting up the exercise which follows in Section C.

B. NOUNS CONTINUED

From comparisons of the entries and their glosses in the exercise, we have produced the shapes that we traditionally refer to as the "endings" of the first declension singular. This method, consisting basically of looking at shapes in terms of form and environment, is one that can most profitably be utilized in classroom work. This is not the only profit that comes from looking at Latin from a structural point of view, but it is certainly one of the initial ones that can show quick returns for young students. In addition to teaching them the so-called "endings" quite rapidly, it imparts almost without notice a severely brief account of Latin syntax and sentence structure, matters of great importance which usually come along much later in the learning of Latin.

By setting up further exercises, such as the one presented in Session II and the one you have just seen on the board at the beginning of this session, we can of course produce all the data needed to supply the "endings" for all five declensions. For the time being, let's deal only with the singular.

The following table shows the results of what such exercises would give us. It is nothing new; it is nothing more than a diagram of the paradigm of all nouns in the singular, which we have always learned and always taught. At least this is true for rows 2-6, which correspond to the nominative, genitive, dative, accusative, and ablative cases of a particular declension. Row 7 requires comment.

Row 7 is a description of Latin nouns in terms of their base forms; i.e., the forms to which the various morphemes (suffixes) are added to produce a particular case of a noun of any given declension.

Latin grammar is traditionally taught by means of the paradigm method, without the paradigms having been arrived at by the means we used just minutes ago. They are merely presented to be memorized. It isn't suggested that it is not necessary for the students to know the material contained in the paradigms; it is. What is suggested is that two improvements are possible: first, that paradigms be arrived at by constructing exercises showing function and structural arrangements of case morphemes (suffixes) in Latin; second, that some departure then be made from looking at the great diversity as presented by the many shapes contained within the paradigms toward some attempt at unifying the material and presenting an intellectually more comprehensible unit.

What the paradigm of the "endings" fails to do is to show the great economy and linguistic unity in the Latin noun. There is actually only one set of morphemes (suffixes) for all nouns and adjectives in Latin, not five. The different shapes which the suffixes take are determined by the shapes of the various stems (base forms) of the nouns.

		← M F Singular →						← N Singular →			
Declension (Class)		I	II	III		IV	V	II	III	IV	1
Endings	Nom	-a	-us	*-C/-s	-ī̆s	-us	-ēs	-um	-C/-e**	-ū̆	2
	Gen	-ae	-ī̆	-is	-Is	-ūs	-eī̆	-Ī̆	-is	-ūs	3
	Dat	-ae	-ō̆	-ī̆	-Ī̆	-uī̆	-eī̆	-ō̆	-ī̆	-ū̆	4
	Acc	-am	-um	-em	-im	-um	-em	-um	-C/-e	-ū̆	5
	Abl	-ā̆	-ō̆	-e	-ī̆	-ū̆	-ē̆	-ō̆	-e/-ī̆	-ū̆	6
Base Form		-A- (− +)	-Ō-	-C/e-	-ī̆-	-ū̆-	-ē̆-	-Ō-	-C/e--ī̆-	-ū̆-	7

*C Any consonant

\+ Capital vowel indicates morphophonemic variations, i.e. the particular allomorph of any given morpheme is determined phonologically, that is, by the environment

**-C/e- Reads "consonant alternating with e"

Look at row 7 in the table. If, for the moment, we take the ablative form as the "base form," we can readily derive the "shape" that appears to be common to all five declensions in the formation of its nominative. (This holds for the other cases as well, but let's restrict ourselves for the moment to the nominative.)

We need add nothing to the stem to form the nominative of Class I. Though there is a diversity of preceding vowels, the final phoneme of Classes II through V for the masculine and feminine is /s/. The unity we see here is that the nominative singular of Latin nouns is formed by either the suffix s or nothing at all. Let's put this information into a somewhat different kind of paradigm, a structural paradigm:

CLASS	I	II	III		IV	V
STEM	-A-	-Ō-	-C/-e-	-ī-	-ū-	-ē-
Nom	-ϕ	-s	-s/-ϕ	-s	-s	-s
Acc	-m	-m	-m	-m	-m	-m

The accusative causes no single problem. Each declension fashions its accusative singular case by use of the suffix -m added to the base form of the ablative.

We can clear up the problem of the diverse vowels by stating several economic laws: /Ō/ becomes /u/ before /m/ and /s/. Any noun not showing the allomorph (for that is what we can call the suffix now) /s/ in the nominative, will show the zero allomorph. Vowel length of stem is lost in the nominative forms of Classes I, II, and IV and in the accusative of I, II, III, IV, and V.

We can also state that /s/ is the marker of the nominative case, and that /m/ is the marker of the accusative case.

In saying that, we mean that s is a morpheme in Latin, used to signal the nominative singular case. We will write it then as {s}. Further, this morpheme has two allomorphs, written as the phonemes in terms of which they appear: /s/ and /ϕ/.

The morpheme for the accusative singular is by the same token {m}. It has only one allomorph, namely /m/.

EXERCISE

Show how the following forms appear before morphophonemic change takes place.

Latin Word	Stem	Nom	Acc
fēmina			
amīcus			
vir			
pater			
ignis			
manus			
diēs			
rēs			

The word vir presents a problem. From the stem, it /-ō-/, it would be concluded that the word belongs to the second declension. But from our information in the structural paradigm we see that nominatives of this class end in /s/. The nominative of vir appears to be much more like the nominative of pater, showing the zero allomorph in the nominative. Ignis is a noun of mixed declension. The form *patr, which would be produced for the nominative from patre, shows a vocalic r ($\overset{r}{o}$), which appears in Latin as er. We conclude that some Latin nouns do not belong exclusively to one declension. Let us remember this; otherwise our system will occasionally look false, unless we remember to state that for some particular noun its nominative is of a declension different from the oblique cases.

C. NOMINAL INFLECTIONS

NOTES TO INSTRUCTOR

1. Let the participants do the exercise at the end of this section by themselves. Then put it on the board.

2. So that the participants may become familiar with the results of the structural paradigms, take several examples for each entry, thus making the whole system as concrete as possible.

C. NOMINAL INFLECTIONS

Masculine and Feminine Singular

CLASS			I	II	III		IV	V	
Base Form →			-Ā-	-Ō-	-C/-e-	-Ī-	-ū-	-ē-	Other
Morphemes	{-s^1}	Nom	-∅	-s	-∅/-s	-s			-s/-i/-e
	{-m}	Acc	-m						
	{-ius}	Gen	-e	-i	-is	-s		-ī	-ius/-yus
	{-i}	Dat	-e	-∅	-ī	-∅	-ī		-i, -∅/-e
	{-∅}	Abl	-∅						

This table gives the whole picture of the singular nominal declension for masculine and feminine.

To the left of the allomorphic suffixes, there is listed for each case a morpheme. The symbol used for this kind of designation is quite arbitrary and the only basic reason for selecting one shape over another is perhaps that one is so common to several of the allomorphs that it seems obvious that it should be chosen; or, as is the case with the genitive, the shape chosen has been taken from the farthest reach of allomorphic possibility to keep it evident that this too is a genitive form. Again, the selection is quite arbitrary, but the one listed here is a common one among descriptivists working with Latin, and is the one used by O'Brien and Twombly in A Basic Course in Latin, (Chicago: Loyola University Press, 1963).

The number above the s used as designator for the nominative morpheme indicates that a further morpheme of s is to be used, and that this s is to be kept distinct from {-s^1}.

It will be noticed that for a second declension noun, such as servus, whose stem we would now designate as /servō-/, we find a genitive form /servī/, showing the stem plus the allomorph /i/ of the morpheme {-ius}. We must state then that before vowels /ō/ is nil. The same is true for /ā/ before vowels. (This can be seen in the dative plural.) Regarding the genitive singular for Class I nouns, the vowel of the stem, /ā/ is followed by e orthographically, but the two combine to form the

diphthong /ay/, with the result that the /Ā/ is not followed here by a vowel, but rather by a glide, and does not then become nil. This feature obtains in the dative singular and nominative plural for Class I as well.

The neuter singular of nouns of Class II, Class III, and Class IV may be described as having the same shape for both the nominative and the accusative. Otherwise there is no difference between the masculine and feminine nouns.

Neuter Singular

CLASS			II	III	IV
Base Form ⟶			-Ō-	-C-/-e-/-Ī	-ū-
Morph	{-d}	Nom	-m/-s	-ø/-s	-ø
		Acc			

The choice of {d} to represent the morpheme of the neuter singular nominative and accusative (having the allomorphs /-d, -m, -s, -ø/) is based on the infrequent appearance of /d/ other than in neuter forms; e.g., quid.

EXERCISE

Given the following morphemes, set up a structural paradigm* for the plurals of Latin nouns:

	MFP	NP
Nom	{-e}	{-a}
Gen	{-rum}	
Abl/Dat	{-bus}	
Acc	{-s}	{-a}

Note: Take representative nouns in the plural from the appendix of any Latin grammar; designate their structural stems, and show the allomorphs that must be added to the stems to produce each particular case ending for each particular stem class.

The first and the fifth declensions have no neuter nouns. There are three in the second declension which do not show the usual m: pelagus, virus, vulgus. The fourth declension has four neuters: cornū, genū, pecū, verū; all other neuter nouns in Latin belong to the second or third declension.

*Your instructor has the charts you need for this exercise already prepared.

CHART A

		← M F Plural →						← N Plural →			
Declension (Class)		I	II	III		IV	V	II	III	IV	1
Endings	Nom										2
	Gen										3
	Dat										4
	Acc										5
	Abl										6
Base Form		-Ā-	-Ō-	-C/e-	-ī-	-ū-	-ē-	-Ō-	-C/e--I-	-ū-	7

CHART B

Masculine and Feminine Plural

CLASS			I	II	III		IV	V	
Base Form			-Ā-	-Ō-	-C/-e-	-ī-	-ū-	-ē-	Other
Morphemes		Nom							
		Acc							
		Gen							
		A/D							

Neuter Plural

CLASS			II	III	IV
Base Form			-Ō-	-C-/-e-/-ī	-ū-
Morph		Nom			
		Acc			

D. ADJECTIVES AND ADVERBS

NOTES TO INSTRUCTOR

1. Let the participants do the exercise in this section by themselves. The instructor may wish to put on the board several representative examples of the participants' work.

2. A list of morphophonemic changes appears at the end of this section. The instructor should carefully define the term, morphophonemic. He may also wish to illustrate some of the rules by pointing out illustrative examples in the material just covered in Session III. Participants will need constant reminding of the function of capitalization, the indication of morphophonemic variations.

D. ADJECTIVES AND ADVERBS

It was stated in the section dealing with nouns that nouns and adjectives in Latin actually have but one set of inflectional endings, the allomorphs for these showing a variety only in terms of the stems to which they are affixed.

If this is so, how can nouns be distinguished from adjectives, especially since we know that adjectives are frequently nominalized to nouns in Latin? Example: Homo stultus est./Stultus est. This, however, can happen only when the noun is suppressed; if it is not, we again have an adjective in stultus.

In addition to being inflected according to number and case, just as nouns, adjectives show at least one inflectional contrast between the masculine-feminine and the neuter forms. This then is the signal that keeps adjectives distinct from nouns; adjectives must show a contrast between the m/f and the neuter form.

Consequently, forms like deus/dea, filius/filia are nouns, not adjectives, since there is no neuter form contrasting with them.

Latin is a language whose nouns have grammatical gender. This means that the nouns show certain sets of inflectional endings that correspond to certain selected inflected adjectives. The gender of Latin nouns can best be learned in the context of an appropriate adjective or two -- much the way young Romans learned their language. The feature of natural gender (whereby the noun has an inflectional ending called masculine or feminine which in biological life does correspond to the noun -- man, woman) plays almost no role in Latin. Though there are certain curious coincidences of this phenomenon, it is hardly a pattern that runs through the structure of the language. It is grammatical gender that forms the patterns in Latin; more precisely, the gender of a noun is determined by which shape of the adjective it chooses out: pīrāta stultus/fēmina stulta. Not even the ending of the noun itself is an invariable guide, only its selection of adjective forms.

There are, in general, two types of forms inflected as adjectives in Latin: The first takes the shape of first and second declension nouns: the other, that of the third.

Base Form	-ō-	-ā-	-ō-
Nom	durus	dura	durum
Acc	durum	duram	durum
Abl	durō	durā	durō

Base Form -C/-e, -ī-

constans	constans	constans	crudelis	-is	-e
constantem	constantem	constans			
constantī	constantī	constantī		etc.	

The pattern is quite as regular in the plural, even for the third declension adjectives.

In addition to the inflectional suffixes we have already seen in the adjectives and nouns of Latin, we find another kind known as derivational suffixes. These suffixes are used to form words that can then in turn function in the inflectional classes, nouns, adjectives, and verbs.

We find these derivational suffixes in Latin in the adverbs, in the verbal adjectives, and in the comparative and superlative degrees of adjectives and adverbs.

Adjectives with /-ō-/ stems form their adverbs with the derivational suffix {-ē}. (Note that we can now designate this suffix as the morpheme indicating adverb formation from an /-O/ stem adjective; e.g., clarus: clarē. Note further that as in the adjectives, /o/ before a vowel disappears. Thus clarē, not *clarōe.)

Adverbs derived from adjectives with stems in /-C/e-, -ī-/ show a derivational suffix of {-ter}. If the /-C-/ stem of these adjectives end in /-nt/ the adverb is formed on the /-C-/ stem -- as in constanter since Latin does not permit the consonant cluster /ntt/ -- otherwise it is formed from the /-ī-/ stem of the adjective, fortiter.

Comparatives and superlatives are formed in Latin by adding the derivational suffixes {-iōs} and {-is-Simō-} to the stems of adjectives, adverbials and prepositions. The masculine and feminine form of the comparative suffix becomes the allomorph /ior/, as in clarior; elsewhere it appears as /iōs/, as in clarius. (Remember that this derivative suffix /iōs/ would appear with the /ō/ as /u/ before /s/.)

The superlative derivational suffix /is-Simō/ appears as /timō/, as in intimus, after prepositions and adverbs; as /Simō/, as in celerrimus, after stems with nominatives in /er/, such as celer; elsewhere it appears as /isSimō/, as in clarissimus. Since, as we have seen, /A/ and /O/ (morphophonemic /A/ and /O/) are nil before vowels, the stems for the first and second declension appear without /-Ā-/ and /-ō-/. The comparatives and superlatives of the third declension stems appear as ordinary consonant stems.

The comparative adverb shows the same structural formula as the neuter comparative adjective -- {-iōs}. To form the superlative of the adverb, the derivational suffix {-ē} is added to the superlative adjective formula -- {-is-Sim-ō-ē}.

EXERCISE

Write two adverbs, positive, comparative, superlative, from each derivational suffix given above. Write two adjectives, positive, comparative, and superlative, from the suffixes listed above. Write these in terms of derivational suffix, stem plus suffix: clarus: {-ē} clarŌ + {-e} > clarē.

MORPHOPHONEMIC CHANGE

The term morphophonemic has been used several times without being adequately commented upon. This was not an oversight. Rather it seems best to describe this feature after it has been seen in operation some time. The term really means nothing more than a morpheme showing phonemic alteration or diversity in its shape. Thus /O/ before {-s^1} and {-m} appears as /u/ rather than /o/.

The following are some of the more important morphophonemic changes that regularly take place in Latin:

A: is nil before /V/ (any vowel) and /y/; elsewhere it is /a/.

E: /u/ before {-d}; nil before /-o/, /i/, and {-nt}; /i/ before {-s^3}, {-t}, {-mus}, and {-tis}; /e/ elsewhere.

I: is /e/ before /r/, a juncture--pause--and {-d}; it is nil before /i/; elsewhere it is /i/.

$\bar{I}$: is /i/ before a vowel; elsewhere /$\tilde{i}$/

$\bar{E}$: is /e/ before a vowel; elsewhere /$\tilde{e}$/.

O: is /u/ before {-s^1}, {-m}, and {-d}; nil before /V/ and /y/; elsewhere it is /o/.

S: appears as /r/ between vowels and after /r/; appears as /l/ after /l/; elsewhere it is /s/.

N: is /n/ except before {-s^1}, where it is nil.

IN: appears as /o/ before {-s^1}; as /in/ elsewhere.

EXAMPLES OF MORPHOPHONEMIC CHANGES

A: nil before /V/ and /y/: puellĀ + /īs/ > puellīs; *amAo > amō
elsewhere it is /a/: puellĀ > puella

E: /u/ before {-d}: genESe > genus.
nil before /-o/, /i/, and {-nt}; ducEo > ducō; ducE + /i/ > duci; ducE + /-unt/ > ducunt
/i/ before {-s[3]}: ducE + {-s[3]} > ducis
before {-t}: ducE + {-t} > ducit
before {-mus}: ducE + {-mus} > ducimus
before {-tis}: ducE + {-tis} > ducītis
/e/ elsewhere: ducE + {-bam} > ducēbam

I: /e/ before /r/: capI + /-re/ > capere
before a juncture: capI > cape
before {-d}: carmen, carminis (> karmenI-)
nil before /i/: laudĀ + wI + /-ī/ > laudāvī
elsewhere it is /i/: laudĀ + {-wI} + /-stī/ > laudavistī

Ī: is /i/ before a vowel: audĪ + {-o} > audiō
elsewhere /ī/: audĪ + {-s[3]} > audīs

Ē: /e/ before a vowel: sedĒ + {-o} > sedeō
elsewhere it is /ē/: sedĒ + {-s[3]} > sedēs

O: /u/ before {-s[1]}: lupO + {-s[1]} > lupus
before {-m}: lupO + {-m} > lupum
before {-d}: vīnO + {-d} > vīnum
nil before /V/ and /y/: lupO + /ī/ > lupī
eO + -ius > eius
elsewhere it is /o/: lupO + {-s[2]} > lupōs

S: is /r/ between vowels and after /r/: mūs > mūrem (rhotacism),
ferre {fer-Se}
/l/ after /l/: malo, malle < {mal-Se}
elsewhere it is /s/: laudA + {-wīS} + {Se} > laudāvisse

N: is /n/ except before {-s[1]}, where it is nil: leoN + {-s[1]} > leō

IN: is /o/ before s[1]: fortitudIN + {-s[1]} fortitudō
elsewhere /in/: fortitudIN + {-m} > fortitudinem

E. ASSIGNMENT SHEET

1. Read all lectures from Session III.

2. Read Langacker on morphology: pp. 187-188; 193-194.

3. Set up a series of structural formulas for the four verbal adjectives:

   present active present perfective passive future active future passive

4. Find at least one additional example for each of the morphophonemic variations listed on page 58.

SESSION IV -- MORPHOLOGY II

Topic	Page	Minutes Needed	Materials Needed	Materials for Distribution
A. Morphophonemics	62	30		
B. Order of morphemes	63	40	Visual IVA	
Rest		10		
C. The Latin verb	67	50		C. The Latin verb
Rest		10		
D. Structure of the Latin verb	75	90	Visuals IVB, IVC, IVD	Examples of Aspect Markers
Rest		10		
E. Assignment sheet	85	10		Lectures from Session IV

A. MORPHOPHONEMICS

NOTES TO INSTRUCTOR

1. Spend about 30 minutes setting up the results from sections 3 and 4 from the assignment.

2. Use this exercise as a complete review of writing the Latin words in phonemics, setting up suffixes as morphemes, showing basic stems plus their morphophonemic variations.

B. ORDER OF MORPHEMES

NOTES TO INSTRUCTOR

1. This section contains the basic approach to setting up structural exercises which participants will be expected to do in their own classes. Therefore, each step must be quite explicit and stated. Leave nothing to conjecture.

2. Recreate all entries and explanation on the board, accustoming the participants to the idea of entries on one side and glosses on the other for the sake of quick comparison.

3. Swahili examples have been used to enable the participants, who will of course already know Latin, to see how the structural exercises should appear to students who probably do not have any previous experience with Latin morphology.

B. ORDER OF MORPHEMES

To gain some facility in looking at language structure as objectively as possible, let us take some examples from Swahili, since this is a language less likely to offer a recognized structure than Latin or English to most participants and students.

1.	alitupiga	'he beat us'
2.	alinipiga	'he beat me'
3.	aliwapiga	'he beat them'
4.	ananipiga	'he is beating me'
5.	anawapiga	'he is beating them'
6.	anatupiga	'he is beating us'

This small amount of material would by no means be a sufficient amount to base any genuinely valid linguistic conclusion on, if we were approaching a new language with anything like field method circumstances. Yet even within the confines of a highly controlled exercise such as this admittedly artificial situation, we can discover some of the basic ways to go about looking at the structure of a new language. Remember, we want to approach the structure of Latin as if it were a new language to us.

After reading the whole list of words (sentences?) in Swahili and their glosses in English, let's begin to compare the items to extract what we may of the way Swahili builds up its verb and pronoun arrangements.

We see striking similarities between all the forms, but disconcerting oddities as well. Actually the noticing of these strangenesses is quite important in unlocking the structure in a problem like this. Probably the first thing we can do with any certitude is to state that each entry has at least one item in common with every other entry; namely, the presence of 'piga.' This may or may not be of any value to our analysis, but it is frequently necessary to make false starts in such an analysis before a correct one will present itself. Students should not too readily be discouraged from making false initial structural analyses, because even their false beginnings will have been based on some perceived structural feature, which, if false, will then be of possible assistance when a more correct analysis is underway.

We might also remark that each word begins with 'a-.' Again, we do not know the value of this observation yet, but it is almost impossible not to make it. Therefore, let us acknowledge and retain it.

What we probably might assume at this point is the likelihood of 'piga' or 'a-' -- one or the other -- being the stem 'beat,' the other, then, the equivalent to English 'he,' since 'beat' and 'he' are at least

allomorphs of shapes that appear in every entry here. Actually, we do not have enough material here to decide which of these is the case. A form like 'wananipiga' -- 'they are beating me,' would supply us with the strong suggestion, but by no means actually certitude, that with a change of pronoun from 'he' to 'they' in English and a change in the initial 'a-' of Swahili to an initial 'wa-' that we are in these prefixes dealing with the Swahili pronoun subject. Such is actually the fact, though one would never rest his conclusion on so paltry a piece of evidence as one example.

From this, however, we tentatively set up 'piga' as the stem for 'beat.'

In comparing entry 1 to entry 2 we note that the only difference on the left is the internal affix (this is known as an infix) '-tu-' as opposed to '-ni-,' these corresponding to two differences we note in the English glosses: the difference between 'us' and 'me.' Comparing these two entries with number 3, we see the Swahili infix '-wa-' as the only difference; whereas, in the English gloss, the only difference is again an object pronoun 'them.'

We would strongly suspect from this that Swahili '-tu-,' '-ni-,' and '-wa-' correspond to English 'us,' 'me,' and 'them.' Again, this is highly provisional and would have to be corroborated by much additional exercise if this were really an attempt to analyze an unknown language in a natural situation.

Comparing entries 1, 2, and 3 to entries 4, 5, and 6, the first great observation we make is the change from the infix '-li-' in the first group to the infix '-na-' in the second. On the other hand, if we had not been supplied the form 'wananipiga' given you apart from the six entries, we would have to list the alteration between these to sets of entries as a difference between '-ali-' and '-ana-,' thus leading us far afield. Such morphemic divisions are frequently made in real analyses and, though false in the sense that the division is incorrect, yet frequently provide valuable information later.

Entries 4, 5, and 6 seem to further validate our hypothesis that the Swahili infixes '-tu-,' '-ni-,' '-wa-' correspond to English object pronoun 'us,' 'me,' and 'them.' Since the entry of 'wananipiga' makes it likely that we would keep initial 'a-' 'distinct from '-li-' in the first group and '-na-' in the second group, we would now want to compare these two infixes to their English glosses. The only difference now appearing in the English glosses is the distinction between the past tense form 'beat' and the progressive form 'beating.' We suspect that '-li-' is then the morpheme showing past tense in Swahili and that '-na-' is the morpheme infix showing present time.

Again, further evidence would definitely be required before any descriptivist would be convinced of such an analysis, and rightly. But the method here outlined is the one used for making a morphemic analysis of part of the structure of a language.

Let us then recapitulate what we have provisionally learned about Swahili structure from those seven examples:

What are the morphemes associated with the following?

Subject pronouns		Object pronouns		Verb Stem	Tense
'he'	a-	'us'	-tu-	piga	Pres -na-
		'me'	-ni-		Past -li-
'they'	wa-	'them'	-wa-		

There is one more very important thing we have learned, actually a thing we so basically assumed that no analysis could have even been undertaken had we not assumed it; namely, that Swahili has a definite and rigid ordering of its morphemes in a linear sense. Otherwise we would not have compared the entries at all. Of course, our assumption that this was the case was based on a fleeting, but previous, structural deduction on our part, based partly on noting that each entry ended in 'piga' and that each entry began with 'a-,' for example.

What then is the order of morphemes in a Swahili simple subject/verb/object sentence? Answer: subject, tense, object, verb stem.

a-li-tu-piga 'he' 'present time' 'us' 'beat'

Just as each language has its own register of phonemes and its own particular inventory of morphemes, so it has its own characteristic order of morphemes. This feature is just as arbitrary as any other feature of a language and in no particular language is the feature more "natural" than in any other language, no more than the register of phonemes or its inventory of morphemes is more "natural" in one language than in another. The structure of any language is unique and completely satisfactory. Every language can do anything any other language can do; the only difference is the way they do it. English order of morphemes and word order is no more natural than the Latin, nor certainly the reverse -- though for far too long English grammar has been taught as if it were some mere approximation to Latin grammar. This is a sister confusion to the idea that Latin is more "precise" than English. Precise about what? The minute you name it you have accounted for it in English, thus somewhat weakening the assertion. Every language is perfectly adequate for dealing with all the events and experiences with which the environment of the speakers of a language come into contact. The borrowing of lexical items into a language (such as jet into Navajo) does not mean that the language is impoverished. It means that the jet was not an item of experience in Navajo culture. When it became such, a word jet was borrowed from English and subjected to the structuring principles of the mysterious Navajo world, treating the word jet as if it were just as Navajo as a device for grinding corn.

C. THE LATIN VERB

It is manifestly impossible to deal with the entirety of the Latin verb within the scope of a few pages and a few minutes. Rather our aim in this section will be to see how exercises may be set up and worked to point out succinctly and reiteratingly the structure of the Latin verb.

EXERCISE 1

1.	puellam amō	'I love the girl'
2.	puellam amās	'you love the girl'
3.	puellās amat	'he loves the girls'
4.	puellam amat	'she loves the girl'
5.	puellās amō	'I love the girls'
6.	puellam amāmus	'we love the girl'
7.	puellam amātis	'you (pl) love the girl'
8.	puellam amant	'they love the girl'

a. What is the form for the accusative singular of the word girl in Latin? .....

b. What is the nominative form? .....

c. What is the likely form of the verb stem? .....

d. What is the term for the phonemes that are added to the verb stem? .....

e. List the morphemes for person endings in Latin, with their English translation.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Notice that the form amō shows a slight difference from the other forms in that there is no evidence of the stem vowel /-ā-/. It may be recalled from the sections dealing with nouns that /-Ā-/ stems

show a disappearance of /A/ before a vowel. So here, the /-ā-/ of the stem becomes nil. These are principles of morphophonemics in operation.

Although in the summaries about the verbs we shall be dealing with structural recapitulations about all conjugations, we shall take all our examples from the first only, so not to waste space and time. The method is what you are to learn now, as it is to be what you incorporate into your instruction to your own students.

EXERCISE 2

1.	puellam amō	'I love the girl'
2.	puellam amāvī	'I loved the girl' or 'I have loved the girl'
3.	puellam amās	'you love the girl'
4.	puellam amābam	'I loved the girl' or 'I was loving the girl' or 'I used to love the girl'
5.	puellam amābat	'he loved the girl' or 'he was loving the girl' or 'he used to love the girl'
6.	puellam amāvit	'he loved the girl'
7.	puellam amāvistī	'you loved the girl'
8.	puellam amant	'they love the girl'
9.	puellam amābunt	'they will love the girl'
10.	puellam amāvērunt	'they loved the girl'
11.	puellam amābo	'I shall love the girl'
12.	puellam amāverint	'they will have loved the girl'
13.	puellam amāverō	'I shall have loved the girl'
14.	puellam amābimus	'we shall love the girl'
15.	puer puellam amat	'the boy loves the girl'
16.	puella amātur	'the girl is loved'
17.	..ut puellam amem	'that I love the girl'
18	..ut puellam amet	'that he love the girl'
19.	puellam amābis	'you will love the girl'
20.	puellam amābamus	'we loved the girl' or 'we were loving the girl' or 'we used to love the girl'

a. With the exception of entries 17 and 18, what can be easily designated as verb stem? .....

b. Latin has <u>aspect</u> to its verb. This means that all the action a particular verb signifies is done under some particular aspect or view. In Latin every verb form is either <u>perfective</u> or <u>imperfective</u>; this in addition to belonging to a mood (indicative, subjunctive, or imperative) and to a time (present, past, or future). This perfective aspect in Latin suggests that the action which the verb names is finished or done, if perfective; undone if imperfective. In comparing entries 2 and 4, what can we deduce about these forms in regard to aspect?.....

c. List all forms from the entries which show perfective aspect:

_____ _____

_____ _____

_____ _____

d. What aspect do all other forms show? .....

e. What does imperfect aspect imply about the action designated by the verb? .....

f. Entries 1, 3, 8 and 15 all show personal endings that are consonant with what we saw from the first exercise in this section. Entries 2, 6, 7, and 10 all show a different and obviously related set of endings. What can we call this set of person endings? .....

Singular		Plural		
'I'	-ō	'we'	-mus	Endings from Exercise 1
'you'	-s	'you'	-tis	
'he'	-t	'they'	-nt	
'I'	-ī			Endings from Exercise 2
'you'	-istī			
'he'	-it	'they'	-ērunt	

g. What is the probable gloss for amāvimus? .....

for amāvistis? .....

h. Comparing entries 4, 5, and 20, we note in addition to the endings (one of which, number 4, seems different) an infix '-bā-.' What is the probable meaning of this morpheme?.....

i. What is the probable gloss for puellam amābant? .....

j. Which set of endings do the forms with the 'bā-' infix seem to have?.....

k. Entry 16 shows a form quite different from any other entry, and there is a corresponding difference in the English gloss. What is this difference? .....

l. Looking at entries 17 and 18 we note a different stem vowel in the verb form. What does the stem seem to be? .....

m. What is the kind of verb found in the English gloss in entries 17 and 18? .....

Notice the ending of entry 17, showing a final '-m' for the first person singular, while entry 18 shows the customary '-t' for the third person singular. Number 17 is similar in this respect then to

entry 4, showing '-m' in the first person singular. From this we will probably augment our list of endings from Exercise 1 to include the alternates -o/-m for the first person singular.

We have in this exercise then three sets of endings, one complete, one almost complete (added to by later suggestions), and one with only one example. Let us give appropriate names to each of these sets of endings, for they are the only ones that Latin has and every verb form -- save the imperative -- will always show one of these forms. (The third set, only hinted at here, will be taken up later.)

Set 1 .....

Set 2 .....

Set 3 .....

n. Entries 9, 11, 14, and 19 are all glossed by use of the future tense in English. What is the infix in Latin used to give this meaning? .....

o. Which set of person endings will the future tense show in Latin?.....

p. Note that entry 9 shows the infix as '-bu'; entry 11 as '-b'; entry 14 as '-bi-'; and entry 19 as '-bi-.' Thus we are again dealing with morphophonemic variations. How shall we then designate this in our correct nomenclature for the future morpheme infix?.....

q. What aspect do entries 12 and 13 show? Do the endings of these two forms show their relationship to one of the three sets already discussed? No, they do not. These forms are compound forms, stem plus another verb. This will be discussed later under the general morphology. What is the probable gloss for the Latin form amāveritis? .....

r. Supply the following:

indicative verb stem .....

subjunctive verb stem .....

morpheme associated with the future tense .....

morpheme associated with the perfective aspect .....
(account for morphophonemic variation)

morpheme for imperfective past action .....

order for morphemes in Latin verb .....

EXERCISE 3

1.	fūr fūrem nōn amat	'a thief does not love a thief'
2.	fūr a fūre nōn amātur	'a thief is not loved by a thief'
3.	puella amātur	'the girl is loved'
4.	puella ab homine amātur	'the girl is loved by the man'
5.	ā puellā nōn amor	'I am not loved by the girl'
6.	tū ā puellā nōn amāris	'you are not loved by the girl'
7.	puellam amāmus	'we love the girl'
8.	ā puellā amāmur	'we are loved by the girl'
9.	canēs ab aprīs nōn amantur	'dogs are not loved by boars'
10.	ā canibus amāminī	'are you loved by dogs'

What are the endings for the passive voice in Latin?.....

Note the great alteration of structure in going from the active to the passive voice in Latin:

puella fūrem nōn amat /-s -m -t/

fūr ā puellā nōn amātur /... -s -tur/

The subject of the active sentence, '-s,' becomes the ablative of the passive; the accusative of the active, '-m,' becomes the subject of the passive, '-s'; the verb changes from an active to a passive ending.

EXERCISE 4

1.	puella ā fūre amātur	'the girl is loved by the thief'
2.	puellam fūr amat	'the thief loves the girl'
3.	puella ā fūre amābātur	'the girl was loved by the thief'
4.	puellam fūr amābat	'the thief loved the girl'
5.	puella ā fūre amābitur	'the girl will be loved by the thief'
6.	puellam fūr amābit	'the thief will love the girl'
7.	puella ā fūre amāta est	'the girl was loved by the thief'
8.	puellam fūr amāvit	'the thief loved the girl'
9.	puella ā fūre amāta erat	'the girl had been loved by the thief'
10.	puellam fūr amāverat	'the thief had loved the girl'
11.	puella ā fūre amāta erit	'the girl will have been loved by the thief'

a. What is the verb ending for the third person singular indicative active? .....

b. What aspect has the tense in entry 2? .....

c. To what group of person endings does it belong? .....

d. What is the passive present ending here? .....

e. Which aspect? .....

f. What morphemes are present in the verbs of sentences 1 and 2? 1..... 2.....

g. What is the suffix corresponding to past continued time?.....

h. What difference is there in the shape of this suffix between the active and the passive? .....

i. What is the future suffix?.....

j. What aspect has the future tense of entries 5 and 6? .....

k. What declension adjective do we find in entries 7, 9, and 11? .....

l. What is the voice (active or passive) of the Latin verb in entries 7, 9, and 11? .....

m. In the English glosses for 7, 9, and 11? .....

n. Distinguish: puella amātur/puella amata est .....

EXERCISE 5

1.	puellam amō	'I love the girl'
2.	imperat ut puellam amem	'he commands that I love the girl'
3.	puellam amāmus	'we love the girl'
4.	imperat ut puellam amēmus	'he commands that we love the girl'
5.	puellam amat	'he loves the girl'
6.	imperat ut puella amet	'he commands that he love the girl'
7.	imperat ut puella amētur	'he commands that the girl be loved'

a. Give the Latin forms for the following:

he commands that you (sing.) love the girl.....

he commands that you (pl) love the girl.....

he commands that they love the girl.....

b. What vowel is the stem vowel for the active voice?.....

c. What vowel is the stem vowel for the passive voice?.....

d. What vowel is the stem vowel for the subjunctive mood?.....

e. For the indicative mood?.....

f. Arrange the last four answers into an economical statement concerning alteration of stem vowel in voice and mood.

g. To what class of person endings do the endings of the present active subjunctive belong?.....

EXERCISE 6

1.	imperat ut puellam amet	'he commands that he love the girl'
2.	imperat ut puellam amem	'he commands that I love the girl'
3.	imperat ut puella amētur	'he commands that the girl be loved'
4.	imperat ut amer	'he commands that I be loved'
5.	imperat ut puellae amentur	'he commands that the girls be loved'
6.	imperat ut ā puellā amēmur	'he commands that we be loved by the girl'

a. What is the probable Latin form for 'he commands that they be loved'?
.....

b. What is the probable Latin form for 'he commands that they love the girl'?.....

c. What is the probable Latin form for 'he commands that you love the girl'?.....

d. What is the probable Latin form for 'he commands that you (pl) be loved by the girl'?.....

e. To which set of personal endings do the verb forms for the subjunctive passive belong?.....

f. To which set the subjunctive active?.....

g. List all three sets of personal endings for verbs in Latin:

1) 2) 3)

D. STRUCTURE OF THE LATIN VERB

The chief benefit derived from a structural investigation of grammatical features is the picture of unity that emerges from economical statements incorporating information gained through structural exercises. Nowhere is this more evident than in the Latin verb.

The first sight of the enormous panorama of forms that must be mastered understandably dismays the ordinary student of beginning Latin. Short structural exercises which elicit basic forms followed by general summaries about the structural unities involved do much toward lessening the general apprehension the student will feel.

In the exercises in Section C, we dealt with only a few sentences using verbs from only the first conjugation. Assuming that we had included enough additional exercises to contain all possible Latin forms and all four conjugations, we would then be in the position to make some of the formulations about the structure of the Latin verb that would supply a concise intellectual picture to the student.

Just as we saw that there is a certain prescribed order for the arrangement of morphemes in Swahili, so in Latin there is a very rigid order for the elements of each verb form. This is less contrast to English morphology than is at first apparent. Compare the English form 'goes' to the impossible form 'sgoe*.' The order of the morphemes is of fundamental importance.

It is possible to set up a general formula that will adequately handle all possible Latin verb forms. This is not to say, however, that every verb form will show the presence of each element, only that whatever elements may be present must fall within the scope of this prescribed order. Otherwise the form will have no meaning. (Note the English example above.)

GENERAL FORMULA

verb stem + aspect marker + tense marker + mood marker + voice, number, and person marker

In addition to fitting any particular verb form into this formula, it is necessary to make the alterations demanded by the rules of morphophonemic change, which we have already met several times.

In the following exercises, note that each of the classes ("conjugations") of verbs in Latin are characterized by their own particular stem. These stems, given morphophonemically are as follows:

First conjugation: -Ā-
Second conjugation: -Ē-
Third conjugation: -E-
Third -iō conjugation: -I-
Fourth conjugation: -Ī-

D. 1 VOICE, PERSON, AND NUMBER MARKER

From the structural exercises we have done -- as well as from others hypothetically done which would have provided us with all possible Latin forms -- we can describe the inflections which occur as the furthermost layer of the Latin verb forms in terms of sets of endings. Except for some imperative forms, all Latin verb forms show these endings and always as their last element. The only thing that can be added to an inflectional ending is an enclitic such as '-que.'

The sets can be designated as the {-o} and the {-or} sets. The first is the active set; the second, the passive. Each set includes morphemes corresponding to each of the persons.

{-o}	{-or}
{-s[3]}	{-ris}
{-t}	{-tur}
{-mus}	{-mur}
{-tis}	{-mini}
{-nt}	{-ntur}

In making a summary of the distribution of the morphemes belonging to the two sets, it must be noted the allomorphs /-m/ and /-r/ occur after the subjunctive marker {-a-} and after the stem {eS-} in place of /-o/ and /-or/. Further, that the present perfective indicative shows four forms in /-i/ which are best construed as allomorphs of the {-o} morpheme set.

DISTRIBUTION

{-a-}	{-eS}	{-wI-}	elsewhere	
/-m/	/-r/	/-i/	{-o}	{-or}
		/-sti	{-s^3}	{-ris}
			{-t}	{-tur}
			{-mus}	{-mur}
		/-stis/	{-tis}	{-mini}
		/-V̄runt/V̄re	{-nt}	{-ntur}

The additional morphophonemic observation must be made that, after derivational /-I-/ and /-Ī-/, {-nt}, is /-unt/; likewise {-ntur} becomes /-untur/.

D. 2 MOOD MARKERS

The element of the Latin verb which expresses mood is found just before the inflectional ending known as the person and number marker.

The indicative does not show a mood marker in Latin. The mood marker for the subjunctive is the morpheme {-ā-}, showing the allomorphs /e/, /a/, and /i/: /e/ for the verbs of the first conjugation; /a/ for the remaining three; /i/ for sim, possim, velim, nolim, and malim.

In terms of the general formula, then, we can set up this table:

verb stem +	aspect marker +	tense marker +	mood marker +	voice, number and person marker	
			ind	{-o}	{-or}
			...		
			subj {-a-}		

Morphophonemically, it is necessary to note that /A/ is lost before any vowel. Thus the form 'amō' is derived from 'amAo'*, showing the person and number marker added directly to the root for the indicative form. The subjunctive 'amem' is derived from 'amAem'*, the mood marker of the subjunctive remaining although the stem vowel disappears before the vowel. The other three conjugations do not have the stem vowel in /-Ā-/ and do not then lose the stem vowel; e.g., retineam, accipiam, and puniam. (In the third conjugation, if the stem vowel remains, this vowel becomes an /i/.)

Latin also has an imperative mood. This mood, like the indicative, has no special mood marker.

Further, it is only for the second person singular and plural that imperative mood forms are found in Latin. Of course the morphemes for these suffixes that do exist for the imperative have allomorphs -- just as the first person of the person and number marker shows the allomorphs /-o, -m, -t/.

	Active	Passive
Sing.	{-s[3]}: /-ϕ/	{-ris}: /-re/
Pl.	{-tis}: /-te/	{-mini}: /-mini/

The /-re/ form for the passive singular listed above is a form that is always in free alteration with /-ris/ throughout the entire imperfective system. It is only in the imperative mood that the /-re/ form alone is found.

MORPHOPHONEMICS

/E/: /u/ before {-d}; nil before /-o/, /i/, and {-nt}; /i/ before {-s^3}, {-t}, {-mus}, and {-tis}; /e/ elsewhere.

/I/: /e/ before /r/, {-d} or a pause; disappears before /i/; elsewhere /i/.

D. 3 ASPECT MARKERS

For the sake of later clarity, it is best here to deal with the aspect markers rather than tense markers which logically is the next element to be considered in the structure of the Latin verb. Tense markers are the subject of D. 4.

From the structural exercises earlier in the session, it was concluded that Latin verbs are marked for perfective aspect. The aspect marker does not appear for imperfective forms in Latin. The marker for aspect occurs immediately after the verb stem; some verbs show a special allomorph before the perfective aspect suffix, e.g. cēpī.

The aspect marker of Latin is represented by the morphemes {-wI-} and {-wIS-}, the first for the present indicative perfective, the other for all other perfectives. There are, of course, allomorphs for each of these, and in general the distribution of the allomorphs can be learned only from a lexicon.

There are, however, some statistics: For those verbs whose imperfective shows an /-Ā-/ or an /-Ī-/, {-wI} is almost always /-wI-/; /-uI-/ is the general rule for /-Ē-/ stems; /-sI-/ for /-E-/ stems; /-I-/ for reduplicated stems as well as those with a change of vowel or stress.

In terms of our general formula:

verb stem +	aspect marker +	tense marker +	mood marker +	voice, number and person marker	
	imperfective		ind	{-o}	{-or}
	...		...		
	perfective		subj		
	pres. ind. {-wI-}		{-a-}		
	elsewhere {-wIS-}				

MORPHOPHONEMICS

Before /i/, /I/ is nil; before /r/, /I/ is /e/; elsewhere it is /i/. /S/ is /r/ between vowels and after /r/; /S/ is /l/ after /l/; elsewhere it is /s/.

EXAMPLES OF ASPECT MARKERS

pres. ind. imp.	pres. inf. imp.	pres. perf. ind.	pres. perf. subj.	pres. perf. inf.
{stem} {-o}	{stem} {Se}	{stem} {-wI-} {-o}	{stem} {-wIS-} {-a-} {-o}	{stem} {-wIS-} {-Se}
		/-wI-i/ /-uI-/ /-sI-/ /-I-/	/-wIS -i -m/ /-uIS-/ /-sIS-/ /-IS-/	/-wIS-/ /-uIS-/ /-sIS-/ /-IS-/
'superō'	'superāre'	'superāvī'	'superāverim'	'superāvisse'
'imperō'	'imperāre'	'imperāvī'	'imperāverim'	'imperāvisse'
'dō'	'dare'	'dedī'	'dederim'	'dedisse'
'habēo'	'habēre'	'habuī'	'habuerim'	'habuisse'
'moveō'	'movēre'	'movī'	'moverim'	'movisse'
'dīcō'	'dīcere'	'dīxī'	'dīxerim'	'dīxisse'
'ludō'	'ludere'	'lusī'	'luserim'	'lusisse'
'scrībō'	'scrībere'	'scrīpsī'	'scrīpserim'	'scrīpsisse'
'pellō'	'pellere'	'pepulī'	'pepulerim'	'pepulisse'
'capiō'	'capere'	'cepī'	'cēperim'	'cēpisse'
'audiō'	'audīre'	'audīvī'	'audīverim'	'audīvisse'
'possum'	'posse'	'potūī'	'potuerim'	'potuisse'
'sum'	'esse'	'fuī'	'fuerim'	'fuisse'

D. 4 TENSE MARKERS

The present tense shows no marker. There are, however, tense markers for both past time and future time in Latin.

The markers for these two tenses always appear before the mood marker, if there is one (the subjunctive), and after the aspect marker, if there is one (the perfective).

The general formula for the Latin verb structure can be further filled in to look like this:

verb stem + aspect marker + tense marker + mood marker + voice, number and person marker

imperfective	present	ind	{-o}	{-or}
...	...	...		
perfective	past ind			
pres. ind. {-wI}	{-ba-}	subj		
elsewhere {-wIS}	past subj {-S-}	{-a-}		
	Future {-bE-}			

Note that for the imperfective forms the past tense marker will appear directly after the verb stem as there will be no aspect marker coming in between.

In the perfective forms, {-ba} appears as /-ā-/. In the imperfective forms, it appears as /-bā-/ for the /-Ā-/ and the /-Ē-/ stems, but as /-ēbā-/ for the other stems.

The marker for the subjunctive of past time is {-S-}. This appears as /-s-/ for the perfective forms, while for the imperfective forms it appears as /-S-/, meaning that between vowels an /r/ appears rather than an /s/.

MORPHOPHONEMICS: Past Time

/S/ is /r/ between vowels; /l/ after /l/ but /s/ elsewhere.

/E/ disappears before /-o/, /i/, and {-nt}.

The person and number marker morphemes for past tense morphemes show the /-m/ and /-r/ allomorphs only.

Future time is shown by the tense suffix {-bE-}, which occurs directly after the verb stem in the imperfective forms and after the aspect marker in the perfective forms.

For the /-A-/ and /-E-/ stems, the future tense suffix {-bE} appears as /-bE-/ for the imperfective forms. For the other stems, the imperfective forms show /-e/a-/. The future suffix appears as /-i/ɸ-/ in perfective forms.

The imperfective forms showing alternative allomorphs regularly show the /-a-/ and the /-ɸ-/ only in the first person singular; /-ē-/ and /-i-/ occur in all other forms.

All future verb forms are marked for aspect.

MORPHOPHONEMICS: Future time

Between vowels /s/ appears as /r/; /i/ appears as /e/ before /r/. The /-m/ and /-r/ sets of allomorphs for the person number markers occur in the future indicative forms of Latin after the /-ē/a-/ allomorph of {-bE-}; elsewhere the /-o/ and /-or/ sets are found.

After the /-bE-/ allomorph of {-bE-}, the /-unt/ and /-untur/ allomorphs of {-nt} and {-ntur} are found.

D. 5 THE INFINITIVE

The active infinitive in Latin is formed by adding the derivational suffix {-Se} to the verb stem. (Recall that the capital letter refers to a morphophonemic situation where different phonemic representations of the morpheme occur. Here, in particular, we remember that /s/ appears as /r/ between vowels in Latin.)

The passive infinitive is formed by the addition of the derivational suffix {-ri} to the stem. The suffix appears as /-ī-/ after /-E-/ and /-ī-/ stems. Elsewhere it is /-ri-/.

EXAMPLES

Class/Stem	-Ā-	-Ē-	-E-	-I-	-Ī-
Active	amāre	monēre	tegere	capere	audīre
Passive	amārı	monērı	tegī	capī	audīrī

/E/ disappears before a vowel. /S/ appears as /r/ between vowels. /I/ becomes /e/ before /r/ and disappears before /i/.

The infinitive is also a nominal, not a noun, but a derivative that operates as a noun in syntactic arrangements. As a nominal it has gender, neuter, and is marked with the zero allomorph /-ϕ/ of the neuter nominative-accusative morpheme {-d}.

E. ASSIGNMENT SHEET

1. Illustrate the structural formulas found in D. 1 through D. 5 by giving two examples for each.

2. Read Langacker pp. 97-140.

3. Read all lectures from Session IV.

SESSION V

Topic	Page	Minutes Needed	Materials Needed	Materials for Distribution
A. Exercises	87	80		
Rest		10		
B. Syntactic devices in Latin	88	50		Exercise 1, Exercise 2
Rest		10		
C. Word order	95	50	Visuals VA, VB, VC	
Rest		10		
D. Function words	100	40		
E. Assignment sheet	104	10		Lectures from Session V

A. EXERCISES

NOTES TO INSTRUCTOR

1. Spend the first 20 minutes writing on the board and discussing the exercise assigned at the end of Session IV. Choose a good concise paper from one of the participants to present.

2. Spend the next hour (at least) running through several examples for each structural formula given in Sections D1 through D5. This must be done very slowly, as it will be necessary at every step to move from the formula into the real Latin forms, constantly dealing with all the allomorphic and morphophonemic variations that make the two appear at first so disparate.

B. SYNTACTIC DEVICES IN LATIN

NOTES TO INSTRUCTOR

1. In discussing this material with the class, put each example on the board, being careful to draw the material to make structural cuts and constituents obvious and unambiguous. It will frequently be necessary to discuss the cuts with the participants before they can be written on the board, to be sure that they are following each step of the way. Do not burden them down with terminology. Set up a few examples and then let the nomenclature emerge by way of an economical clarification, rather than an additional onus.

2. Do the exercises together, taking them a sentence at a time and putting them on the board. Try any number of possibilities until all participants are in fair agreement as to which cuts may be made. As to the rules of government, it must now be assumed that much material of the kind presented here has been gone through and that the participants have many of the rules of Latin syntax at their disposal and can set these out succinctly in terms of morphology.

B. SYNTACTIC DEVICES IN LATIN

An ideal description of the structure of a language proceeds in a hierarchy of complexity, going from the elements of phonology to the constructions called morphemes, which then are used to fashion more complicated and usually longer utterances. In such an ideal system each stage is explained in terms of the earlier ones, not in terms of more complicated ones. Such, however, is only the ideal. In actuality it is usually quite necessary to work on several levels at the same time. It is, for example, quite impossible to arrive at the inventory of phonemes of a language without setting up minimal pairs, which have been chosen because they are recognized by the speaker as having a distinction of phoneme (sound) and a distinction of meaning (morpheme). Thus, even on this simple a level, systems of differing complexity cut across each other. This becomes more pronounced as one approaches more difficult language problems.

Although it is therefore impossible to operate on only one level at a time, it is possible to state one's conclusions in terms of the hierarchy to keep the description as neat and succinct as possible. Descriptions of morphology should be in terms of the phonology; descriptions of syntax should be in terms of morphology. If this is not strictly possible, at least its opposite can be avoided: description of phonology in terms of morphology, and of morphology in terms of syntax, a procedure that has sometimes tempted grammarians.

Syntax, then, is best approached in terms of the morphology of a language, thus making it difficult to keep them always distinct.

There is no area in modern linguistic study so fraught with battle, intrigue, and profitless confusion at the present time as is that of syntax. On the surface, it would appear that syntax should be a study of the way words (morphemes) are put together in a language. And that is actually what practically everybody agrees it is. The problems arise when the various linguistic groups set to stating how these elements are, may, and must be united. The reason for the problem is of noble and ancient lineage; we do not know the mechanism or process whereby we think or create (use) language. We know that we do, that we apparently always have, and that all languages seem to be equally useful for reporting our thoughts, though each does this in a characteristic and unique way.

In recent years there has emerged a great debate about the relationship between surface structure and deep structure of language. The syntactic problems consequent from this are legion, mercurial, and elusive of formulation. The reason again is much the same: If the obvious things that happen in syntax are to be called surface structure, what does deep structure deal with? It must deal with the way we think or fashion concepts and then connect these to surface structure. And,

again, who is going to tell us about thinking? Any attempt to do this is at best a possibility, and all too often a humorous possibility. There is no reason to assume that a description of a language is a replica or recapitulation of the process (symbolic process) whereby we create language and use it. Any number of descriptions of a particular language are possible, and each may have its own value, that of looking at the particular language from a definite and limited perspective. It is unlikely that any description is, however, anything more than a post-facto observation of the process of creating and using language. Further, the steps that we delineate in any description of a language are themselves post-facto formulations of our observations about language that has been used (created or spoken) by someone, not an observation of someone's symbolic process. The ignoring of this distinction has added an enormous amount of fuel to the tedious quarrels of the generative grammarians and their rules of transformation, which finally -- in spite of occasional half denials on their part -- purport to be replicas of the way we create language and use it. Let us here try to deal with syntactic problems from some less omniscient position.

Let us, however, keep alert to the possibility of there certainly existing elements of syntactic structuring -- much as phonemes -- within every language. The possible combinations of such elements would then produce larger combinations (syntactic constructions) which should assume certain patterns, just as phonemes form certain patterns in combination to form our morphemes, words, and sentences. At the present time, however, these basic units of syntax have not been isolated or formulated.

There are, however, certain syntactic devices we can examine with profit, for they do give us rather copious standards of formulation for any particular language.

In looking at Latin nouns and verbs, we become acquainted with inflectional and derivational suffixes, both of which are added to stems to form new meanings. Syntax is involved in the arrangements of these constructions that are formed by inflection and derivation into larger units of construction.

One of the most frequent questions that students of Latin ask themselves and each other in trying to work out Latin sentences is "What does this word go with?" This question exposes one of our most enormous problems in dealing with Latin: concord. By concord is meant words that go together. "Fīlius bonus vidit patrem" makes the device of concord more obvious even than say "Fīlius est bonus," though no more certain and integral to Latin syntax. Students learning Latin would say fīlius and bonus go together. Structuralists would alter the nomenclature slightly and say that fīlius and bonus form concord.

The English of "Fīlius est bonus" is "The boy is good." If a native English speaker were asked to make a division in this sentence, it is almost certain that everyone who knows English as a native speaker or

really well as a foreign language would make the cut "the boy" and "is good." A cut such as "the" and "boy is good," or "the boy is" and "good" are not English structural cuts. We do this intuitively, without always being able to give good reasons for our insisting that one tells us something about the way English puts things together and another does not.

There are some measures we can take against just intuition here. For instance, we can use substitutes. Instead of "the boy," we all (all native speakers) agree that we could in this slot substitute the word John, giving us "John is good." Or working from the other end, we might say "The boy is seven years old." Or looking at it from the middle, "The boy seems good." We can accept all these substitutes, not because the words substituted have identical or even similar lexical meanings, but because the substitutions all work in with the same structure as the original sentence, showing the same structural cut we made and insisted on as being the only one possible.

From this we can deduce that, from the structural point of view, members of the same part of speech are in general substitutable. There are, of course, many complications to this statement, but in the large it is true.

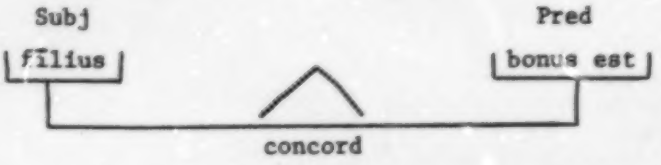
There are, moreover, many issues involved in the procedure above in both Latin and English, in making the structural cuts we made. Let us back up and look at some of the operations involved in being able to make these cuts.

As we saw in the earlier sessions, we have good reason to refer to Latin as a highly inflected language. For nouns, this means a paradigm of cases, each with a meaning in the syntax of Latin. Any demand for a specific case is called government. Thus government signals the nominative case as the subject of a finite verb: "Fīlius bonus est." The word fīlius, showing the morpheme {s[1]} which we set up in the session on nouns, is the nominative subject of the verb est. The nominative also signals (government) the complement of a linking verb, as here for the adjective bonus. We can tell the gender of the noun fīlius here because the noun selects the shape of the adjective that corresponds (concord) to its own gender. (Remember it is the use of adjectives with nouns that point out the gender of nouns, not the other way around; e.g., pīrata bonus lets us know that the noun pīrata is in Latin syntactic arrangements to be dealt with exactly like the fīlius of fīlius bonus, not like the puella of puella bona.)

So it is then that in our examples "Fīlius bonus est" and "Fīlius est bonus," government of case establishes identification for us of both subject and complement of verb. This is, of course, heavily aided by concord of inflectional ending. Government and concord may work together, as in Latin, to help identify constructions that go together, or, more properly, to identify consitutents that are related, even across structural cuts.

We made a structural cut "fīlius" and "bonus est." We can identify subject and complement because of government of case. We can place

the adjective modifier where it belongs because of concord, which exists across the structural cut to let us know which elements of the fragments are to be related.



A further instance of concord in this example, in addition to the agreement between adjective and noun in gender, number, and case, is the concord between verb form -- third singular -- and subject in person and number. Thus concord exists between verb and subject as well as between noun and adjective.

One of the tools descriptive linguists have invented in syntactic studies is the immediate constituent, which is the kind of thing we just saw in cutting "Fīlius bonus est" into its immediate constituents, "fīlius" and "bonus est."

Take the English example, "My aunt always orders lobster." If asked to cut the sentence into its immediate constituents, what shall we decide upon? "My aunt always" and "orders lobster"; "my aunt always orders" and "lobster"; or "my aunt" and "always orders lobster." Native speakers will choose the last possibility as being the only one that shows the way English groupings of words may work together in this sentence. We would then say that "my aunt" and "always orders lobster" are the immediate constituents of the sentence. Each of these then has its own constituents, and so on down the line, depending of course on the length of the utterance. To make our nomenclature somewhat more precise, let's now refer to the sentence "My aunt always orders lobster" as a construction. We can then identify the immediate constituents of this construction. Each of these immediate constituents then is a construction, from which we can supply immediate constituents, and so on. Thus the description of relationships assumes a hierarchial shape: A construction is explained in terms of the next lower level of immediate constituents, not the other way around.

EXERCISE 1

Make necessary cuts for the following constructions in terms of their immediate constituents. Make only one cut for each sentence at first. Then take each constituent and make possible cuts into further constituents. An example follows.

1. the young girl who lives next door has gone to Canada

2. the young girl who lives next door <u>and</u> has gone to Canada

3. the young girl <u>and</u> who lives next door <u>and</u> has gone to Canada

'on the same night it happened that the moon was full'

'nouns in Latin are inflected for number and case'

EXERCISE 2

In each of the following Latin sentences make structural cuts which indicate the immediate constituents of the constructions. In addition to this, state for each sentence all instances of government and draw lines showing all uses of concord.

'homō locum ōrnat'

'frūctū nōn foliīs arborem aestimat'

'servus cāseum ā mēnsā portat'

'in mundō melius nōn est quam fīdus amīcus'

C. WORD ORDER

NOTES TO INSTRUCTOR

1. This section contains the students' only introduction to suprasegmental phonemes. Very few examples have been given since this is a feature that functions more obviously in English than in Latin. It is, however, necessary to make it clear to the participants how these morphemic patterns arising from stress, pitch, and intonation contours make up much of the meaning of modern English. Only then can their content be shown to be similar to the effect produced by Latin word order. Therefore, go to some pains to be sure that even in so brief an introduction that the basic elements are clear. Take additional examples, if necessary, being careful not to get too far afield into real complexities of English sound patterns.

2. Do the exercise together, the instructor writing the entire process on the board, step by step. Do not insist that the English be written in phonemic notation, since the English phonemic system has not been studied here and is, of course, quite different from the Latin one.

C. WORD ORDER

In addition to the many occurrences of government and concord in Latin -- see exercises in assignment for Session V -- there are other syntactic devices which also play important roles in Latin grammar.

We have mentioned earlier the great importance of word order in English. Compare "The man chased the cat up the tree" and "The cat chased the man up the tree." Exactly the same words appear, but in a different order. The meaning, however, is vastly different to the speaker of English. In Latin, on the other hand, we can find such a variation as this:

1. Iūlius Mariam vīdit.
2. Iūlius vīdit Mariam.
3. Vīdit Iūlius Mariam.
4. Mariam Iūlius vīdit.
5. Mariam vīdit Iūlius.
6. Vīdit Mariam Iūlius.

And as we have stated before, each of these Latin expressions means much the same, at least in the sense that the subject is always the same subject and object is always the same object, as opposed to the English sentence above where a shift of a single word completely reverses roles for subject and predicate. One reason the Latin sentence retains its essential meaning, in spite of what shape it is pushed into, is the presence of inflectional suffixes, morphemes which signal subject, object, and other cases in all circumstances without regard for the word order.

This is not, however, to suggest that word order has no meaning in Latin. Anyone who wants to take such a position as that need only try to read the poetry of Horace or the prose of Tacitus. Word order is of vital importance in Latin, and not just in terms of stylistics or of aesthetics. What then is the role of word order in Latin if it does not signal the necessary kind of thing that word order does in English?

Among other things it can probably be stated that at some time in the history of the Latin language, and that is a long history indeed, each of the six Latin sentences listed above would have found preference over the others as being more appropriate, more correct, better style, and so forth. This means that the sentences do mean something different; they are by no means identical, even though there is some kind of constant lexical meaning that will emerge from each that is the same.

Of course, beginning Latin students are told early enough that Latin verbs come at the end of a sentence. This is patently not true. Nor

do they appear especially at the beginning of a sentence. Nor in the center. The Latin verb appears where it is used most meaningfully, just as does every other word in a Latin sentence. The order is not meaningless. Most definitely it is not whimsical. This is perhaps why it is such a very difficult thing to try to teach Latin word order to beginning as well as more advanced students.

In the section on phonemes we gained some introductory insights into the vowels and consonants and their combinations which constitute the phonemic inventory for Latin. Such phonemes are known as segmental phonemes. This implies already that there must be some other kind of phonemes. And there are. The other kind of phonemes are the suprasegmentals. These include, for a language like English, such vital elements as pitch, stress, and intonation patterns. A thing known as juncture (a pause) and clause terminals (the punctuation signals with which we end clauses or phrases) complete the register of suprasegmentals for English. Each of these is a very complicated issue, but does not pertain exactly to our study of Latin. Thus we shall not go into them in detail, but only to the extent that it is possible to see that Latin does with word order some of the things that English does with its suprasegmentals.

We know little of the intonation patterns that Latin used. This must, as in all languages, have played an important role. The same can be said of stress and pitch.

In English it is customary for linguists to distinguish four different stress accents: primary, secondary, tertiary, and weak. These are written /ˊ ˆ ˋ ˘/. There are also four pitch levels in ordinary English; these are usually designated as 1, 2, 3, and 4, going from lowest to highest.

An unusual screech might be designated with a new number 5 all of its own. There are three clause terminals, written /↘ ↗ →/; these signify falling intonation, rising intonation, and retained or sustained intonation. From all these phonemes, we can state that the usual sentence produces a /231/ pattern with an appropriate clause terminal at the end.

Let us look at a few examples.

'Julius loves Mary'

1.	/ǰulyɨs ləvz meriy/	segmental phonemes
2.	/ǰulyɨs + ləvz + meriy/	seg. phon. and juncture
3.	/^{2}ǰulyɨs + ləvz + ^{3}meriy^{1}/	seg. phon., juncture, pitch
4.	/^{2}ǰùlyɨs + lə̂vz + ^{3}méri y^{1}/	seg. phon., juncture, stress, and pitch
5.	/^{2}ǰùlyɨs + lə̂vz + ^{3}méri y^{1}↘/	seg. phon., juncture, pitch, stress, and clause terminal
6.	/^{2}ǰ͡ùlyɨs + lə̂vz + ^{3}méri y^{1}↘/	segmental and suprasegmental phonemes

Which of the following Latin sentences best translates the last English sentence above?

Mariam Iūlius amat.
Amat Mariam Iūlius.
Iūlius Mariam amat.

Notice that we can make the English sentence above into a question merely by changing the clause terminal from a falling arrow to a rising arrow. It is, of course, a particular kind of question. It would probably occur after someone had been told that "Julius loves Mary" and he questioningly responds, "Julius loves Mary?" The ordinary question, of course, would be "Does Julius love Mary?"

There is certainly some truth to what beginning Latin students are told about the verb at the end of the sentence, but not usually the way it is presented. The point is that the initial and final position in Latin word order are of fundamental importance to the suprasegmental meanings to be imposed on the Latin words of the sentence. Let us look again at our six Latin sentences and try to translate them into English. We can do this by a combination of differing vocabulary items and a change of intonation patterns in English. (Do not write the segmental phonemes for English, only the suprasegmentals.)

1. 'Iūlius Mariam vīdit"

Julius saw Mary. /$^{2}\acute{}$julyɨs soH $^{3}\acute{}$meriy$_{1}\searrow$/

2. 'Iūlius vīdit Mariam'

3. 'vīdit Iūlius Mariam'

4. 'Mariam Iūlius vīdit'

5. 'Mariam vīdit Iūlius'

6. 'vīdit Mariam Iūlius'

(Note that it is not possible to translate each of the Latin sentences with the same three-word construction of English each time. This can be done only when the suprasegmentals of English can be sufficiently altered to accommodate the Latin suggestions. In the other cases, an extended English sentence must be used.)

Just as in English, word order and the suprasegmentals work together to form our most intricate syntactic patterns; so, in Latin, word order along with concord and government account for its major syntactic arrangements.

It might be mentioned that government of case is not totally missing in English. It is, however, restricted to the pronouns, and even there is a more marginal feature of syntax than is word order. For example, if a native speaker is asked to correct the sentence "Mary sees he," he will correct it to read "Mary sees him," not "He sees Mary," thus indicating that to him word order has priority over case. Further reduction of case distinction -- even among the pronouns -- is now taking place to the extent of constantly using the nominative instead of the accusative after prepositions and in double accusatives: "Will you go with he and I?"; "They gave it to my husband and I." On the other hand, there is the almost thoroughly acceptable "It is me"; "It is him," in which the accusative has replaced the nominative; although, to some extent, the accusative here has been a feature of Germanic (and this means English) throughout its history, even at a time when the language was highly inflected and when both government and concord played a role in Old and Middle English much similar to that in Latin.

D. FUNCTION WORDS

NOTES TO INSTRUCTOR

Further examples should be brought forth by the instructor to show the signaling function, especially of the definite article. Investigate the relationship to the definite article of words like some, many, any, none.

D. FUNCTION WORDS

Supposing you received the following telegram: ARRKVONG TUESDAY NOON. PLEASE MEET TRAIN. JOHN. What is the first thing you do? You do not stop confused at the first word. You probably recognize it as a mistake and proceed with the rest of the message, which of course makes the first word clear. There are perhaps possibilities other than ARRIVING being substituted for ARRKVONG; but, in the context of the rest of the message, none of them probably even occurs to us and certainly none of them would make sense. It is the so-called redundancy factor in language that causes us to correct the message. That is, not all combinations of vowels and consonants actually do exist; and, when some mistake occurs, we correct it in terms of the nearest accepted possibility, rejecting combinations that are foreign to the language. We do the same thing in spoken language, though we usually have a first reaction of finding the slips that other people make at least slightly humorous. Our own we find to be rather embarrassing, and are quick to explain away.

There are other things about our telegram that may command our attention. We would call the style appropriately enough "telegraphic." We acknowledge by calling it this that the message is truncated in the sense that some of the words ordinarily considered necessary are missing. ARRIVING has been used instead of some form with the subject pronoun, such as "I am to arrive." Instead of NOON we would in everyday acceptable language hear either "at noon" or possibly "around noon," but not just "noon." TUESDAY would be unacceptable in this position in conversation. We might well say, "I shall arrive Tuesday at noon," but it would have to be altered to read "I shall arrive at noon on Tuesday" if the word order of "Tuesday" is changed.

Further, before TRAIN, we would have to have a definite article in spoken English: "Please meet the train" or, even more likely, "Please meet my train."

There are two principles of language here that we want to note. The first, again, is that of "redundancy," or the capacity of being able to supply the correction or meaning necessary simply out of a knowledge of what things are possible and what things are not in a language. The second is the so-called constituent classes known as function words.

In the message of the telegram we see two constituent classes of function words: the definite article (the train) and prepositions (on Tuesday, at noon). In our message here, it is possible to leave out the prepositions because the principle of redundancy makes it clear what prepositions must be supplied. If one were smuggling some contraband by train and sending a telegram ahead to an accomplice, it would probably be necessary to state the preposition quite distinctly as either "under train," "inside train," "on top of train," or everywhere else the furtive mind might have sought out the hiding place.

One of the chief characteristics of function words is their restricted lexical meaning. How can we supply a meaning for the in the telegram message extension "meet the train?" It is very elusive. Let's look at a few examples of the definite article in English.

The hat is pretty.
Gold is pretty.
Hats are pretty.
The hats are pretty.
Some hats are pretty.
The gold is pretty.

In a language like German, we would find a translation "Das Leben ist gut" for the English "Life is good," showing the need of German to supply the definite article where in English a definite article would be quite out of place. Whereas we would find the expression "Hat is pretty" to be either baby talk or pidgin English, we accept as perfect English "Hats are pretty," indicating that, when plural nouns are used, we do not need a definite article. We could say, "The hats are pretty," and this indicates some specific hats we are referring to. "Gold is pretty," however, is an acceptable sentence, as opposed to "Hat is pretty," because in English gold is a different kind of noun from hat. It is a mass noun, and in English mass nouns are not used with the definite article unless a meaning of particularity is intended. "The gold is pretty" refers to gold that has been seen, discussed, or at least somehow already been an object of attention. We would not hear "A gold is pretty," except in a possibly very unusual situation.

From this it can be seen that the definite article in English is not so much related to lexical meaning as say words like cat, horse, or piano. Rather, the definite article is used to signal structural information about the noun or nominal that follows it. We are told in what group (constituent class) to put the nominal, depending on the way the definite article is used.

Another group of words that are function words, though of a slightly different kind, are prepositions. Prepositions do have lexical meaning. Thus, words like in, out, under, have distinct lexical meanings, as opposed to the definite article in the hat, and the man. We say, therefore, that prepositions are substitutable for each other, with, of course, an accompanying change of meaning, since there is lexical contrast between the prepositions. What is structurally significant about the preposition is that it is a preposition rather than some other kind of word. We expect to find it in phrases with nominals. It is not just the lexical meaning which is important, but its structural signal by virtue of being a preposition.

From this it might be objected that prepositions are no different from other classes of words, such as nouns. There are certain differences, however. There is a small number of prepositions. Nor are new additions to the class either likely or numerous. The probability of a new preposition coming into the language is about the same as that for a new kind of article coming into the language; that is, quite remote. The possibility for new nouns and verbs, and from them adjectives and adverbs is very much larger; in fact, it is quite common and happens daily.

Another feature of great distinction between nouns and prepositions is their distribution. The preposition at is a common one; the noun table is an equally common noun. It is quite possible to write a number of novels, plays, and histories without once using the word table. The possibility of not using the preposition at is rather out of the question. The use of nouns is more highly related to the subject matter at hand than are prepositions. In any kind of work on any kind of subject all the prepositions are likely to be used many times. Not so with all nouns. As a matter of fact, no single native speaker even knows all the nouns of his own language, not to mention those of another language. He forgets some each day and probably learns one or two new ones each day. There exist highly elaborate statistics on this feature of language usage, but it appears more whimsical than factual to use them.

Latin, of course, does not have any definite articles. For this reason, all kinds of curious things are frequently said about the fault of Latin in this respect on the one hand or about their useless presence in English on the other. Both kinds of comments are beside the point. The point is that in English definite articles are necessary elements of structural signaling. In Latin, they are not. It is not a question of one language being more precise or more definite than the other. They are different; that is all. Each has its own structure, complete and unique, and can with that structure do for its users all that a language need do by way of categorizing and organizing human experiences. This is not to deny that each language does in truth have a structure that so habitually produces reoccurring characteristics, which are seen in its literature as well as in other features of action on the part of native speakers, that one feels he can certainly identify a "French" way of doing something, or a "German" way of thinking. This we do, and for good structural reasons, for the language of a people is related to the way they structure other features of their culture. That is, language does not cause them to structure their other cultural activities in a similar fashion. Rather they fashion them all, language included, in a parallel manner, not in a cause and effect relationship. And it is these recurring features of structuring that we can learn to recognize in a foreign language and a foreign culture.

Prepositions in Latin are function words in the same sense that they are in English: They signal the function of a nominal. In addition to prepositions, there are conjunctions, both coordinating and subordinating, which act as function words in Latin.

All these function words, in both Latin and English, have a set of common characteristics. A function word must be a member of a constituent class of highly restricted membership. Its distribution in any corpus of the language is highly unrelated to the nature of the subject matter of the material. Finally, a function word can be recognized as signaling structure far more than supplying any lexical importance, at least within certain limits.

E. ASSIGNMENT SHEET

1. In learning a second language, the really important task consists of getting acquainted with structural signals, not vocabulary items as such. To be sure, vocabulary is vital, since language cannot be used without it, but, unless the structural signals are understood the vocabulary remains useless. This is one of the most common experiences of the beginning student, that he will know the lexical meaning of all the words and yet be unable to glean any meaning from the sentence. This is because he has not yet mastered the structural signals. Students can be assisted in this to a great extent by having explained to them such syntactic devices as government and concord, as well as word order particulars.

   Set up structural exercises showing government:

   1. ablative used as adverbial modifier

   2. genitive in the environment of certain adjectives

   Show with lines all concord and with explanation all case government.

2. The participants should be encouraged at this point to start using such exercises in their own classrooms with their own students. In particular, let them be concerned to teach the students to make structural cuts in Latin utterances with give its immediate constituents. Let all instances of concord be graphically illustrated and let government be stated consistently and repeatedly. Only after this becomes clear to them will students be able to profit from pattern drills in the sense that they will actually understand the Latin.

3. Read Langacker p. 30; 76; 175-248; 70-80.

4. Read all lectures from Session V.

SESSION VI

Topic	Page	Minutes Needed	Materials Needed	Materials for Distribution
A. Lexicon	106	20		
B. Word structure in Latin	109	60	Visual VIA	
Rest		10		
C. Exercises in lexicon	114			Exercises in lexicon (exercise)
1-7		55		
Rest		10		
8		60		
Rest		10		
D. Recapitulation	116	20		

A. LEXICON

NOTES TO INSTRUCTOR

1. Spend ten minutes discussing at the board the exercises assigned from the last session, showing concord and government lines for each example selected.

2. In Section A itself, be sure that the various classes of morphemes are made clear to the participants, not so much through definition as through description and example.

A. LEXICON

By lexicon is meant nothing more than the stock of morphemes in a language -- the entire register of morphemes. It is a simple word for an enormous content.

At any particular minute it is very difficult to say just how many words are in existence in a language, since the rate of attrition and growth is never constant and is dependent upon many social, economic, and political factors. It is probable that Modern English has more than 650,000 words. And that, of course, is not the same as the number of morphemes.

During our session with the morpheme we learned to describe it -- at least initially -- as the smallest unit of meaning in a language. There are many complicating features beyond the intent of our task right now, but this is at least a good working use of the concept.

There are several significant classes of morphemes which linguists usually agree upon. Full or empty is one designation. Another is free or bound. These two sets of terms are not synonymous, though at first it may seem tempting to treat them as such. A good example of an empty morpheme is the function words discussed in the last session. The definite article and, to a lesser extent, the prepositions of English, are empty morphemes. Full morphemes are those with lexical content.

In the sentence, "I write the name of a woman on the paper," it would be very difficult to assign any real lexical meaning to the words the, of, a, on, and the. On the other hand, I, write, name, woman, and paper are almost enough to give us some sense of the original sentence. At least we know much of what is going on in the sentence. It is from these full morphemes that we gain most of this information. The empty morphemes signal for us how the full morphemes function. All this distinction is a matter of degree; obviously some empty morphemes have more lexical meaning than others, and there seems to be no way of drawing a sharp line of demarcation.

The other two designations, free and bound are somewhat more complicated. Let us take the word truth. We can agree that it has meaning; further, that it is probably only two morphemes. Even though we do find the element '-th' in words like sooth, and we are relatively sure our word is based on the word true, still we can give no meaning to the '-th' by itself. Nor can it ever stand by itself in an English sentence. It is a bound morpheme; whereas true is a free morpheme.

Looking at the word untruthfulness, we find that we can quickly decide that 'un-,' '-ful,' and '-ness' are all bound morphemes. True is the only free morpheme in this construction. It is the only morpheme in the word that can stand by itself in an English sentence and have full meaning.

We recognize the others as necessarily being part of a larger construction. It is not unusual, however, for two full morphemes to be combined in English to form a compound, e.g., hothouse, bathroom, eggbeater. Thus, there is no hard and fast rule about which morphemes, bound or free, may be compounded in English. This is largely a matter of learning individual forms. We can say untruthful, but not unfalseful*, as the latter does not happen to be an acceptable English word, even though it possesses the same structure in regard to bound and free morphemes as untruthful. In the same way, a young child or someone learning the language may perhaps on the analogy of walk:walked say go:goed*; the analogical inference is correct, but the form is wrong. Thus, mastery of the structural form is not enough; anyone learning a new language has also to learn which particular formations actually do exist and which do not.

There is another way of looking at the morphemes of a language and that is in terms of whether they are roots or affixes. We can describe the word table as a free morpheme, as a full morpheme, and as a root as well. Its capacity as a root is seen when we add '-s' to it to form tables. We refer to the '-s' as a suffix; further, we refer to it as an inflectional suffix because it does not alter the part of speech of the original word. Tables is still a noun; the only change has been in number. It has been inflected for number. The word truly shows a different kind of suffix, one that changes the part of speech. It has changed from an adjective to an adverb; an adverb has been derived from an adjective. Therefore, we refer to this as a derivative suffix. However, it is not always the case that a derivative suffix changes the class membership of a word. Emphasize and reemphasize are both verbs, in spite of the presence of the derivative suffix 're-.'

There is not always an obvious signal or marker in English when a word does change class membership. It can go from a noun to a verb with no overt signal, save the structure of the whole phrase, clause, or sentence. A word like table can be used as a verb: "We tabled the discussion" is a comprehensible English sentence. "He chaired the meeting" is a common bit of modern officialese, using the noun chair for a totally new function, that of a verb. This is a growing tendency in English. It does, of course, vastly enrich our vocabulary possibilities and is not likely to create any confusion, since the larger structure containing such words will always make the function quite clear. It is, however, apparently a universal characteristic of human beings to feel that any such liberty taken with a language is a threat and a danger, at least aesthetically, to the highest standards of the language. This is probably not true, and reflects nothing more than the basic human reaction to all change.

B. WORD STRUCTURE IN LATIN

NOTES TO INSTRUCTOR

1. There are several items in this section which have not been previously discussed and are not discussed as such here: e.g., cognate words, etymology, language change. The instructor may be called upon to make comments on these important features of language study. Space and time do not permit them to become objects of sessions themselves, but enough should be said about them to make them clear. Refer to sections in Langacker, looking at them together, if necessary.

2. Put all tables and the information they contain on the board as you discuss the section. Individual problems which arise should be solved before going further.

B. WORD STRUCTURE IN LATIN

Students taking Latin are frequently encouraged to make attempts to acquire a large Latin vocabulary by using a method based on study and recognition of cognate words. This is a very uncertain method in that it almost demands that a user of it must totally know Latin beforehand to be sure that the particular inference being made about the Latin cognate is the one used in the English word. This is because language is constantly changing, and the derivation of a word, its etymology, is not always a sure clue to how the word is now used. It is, to be sure, a fascinating subject, and one that can be very useful at a certain point in the study of a new language. But for a beginner, the pitfalls are greater than the securities. The suggestion is not being made that students not be apprised of related words when they meet them, as they so often will, but only that they not be deluded into thinking that because they know the Latin word they will know the meaning of the English word derived from it; or that because they know the English word they will know the semantic fields present to the original Latin word. Semantic correspondences are seldom that keen between languages and insisting that they are makes for eventual confusion on the part of students.

A thing that early impresses students of Latin -- and confuses them -- is that so many words look alike. This is, of course, no more the case than in their native English, but here it has become instinctive; whereas in Latin it looks very strange. There are two reasons so many words look alike, but have subtle distinctions: inflectional and derivational suffixes in Latin. An early introduction of these principles to students can do much to allay the sense of strangeness they feel in meeting new words that look a bit like old words but not enough for them to be sure of the meanings.

In general, inflectional and derivational suffixes in Latin work much as they do in English, the chief difference being the great number of inflectional suffixes of Latin compared to the few of English. However, it has already been pointed out how the students should be taught to view these inflectional suffixes as helpful signals for getting to immediate constituents and larger constructions of meaning in Latin by tracing out the patterns of concord and government.

Every Latin word contains a <u>base</u>. It may contain more than a base and it may contain more than one base, but each Latin word will contain a base. This is not to be considered synonymous with a <u>stem</u>. The difference between these two terms will become clear as we work with Latin words. Initially, however, we can say that affixes are added directly to roots or to constructions which contain a root plus one or more other morphemes. The affixes may, in Latin, be either prefixes or suffixes.

A <u>stem</u> is any morpheme or group of morphemes to which a prefix or suffix may be added in Latin. Thus, a root may be a stem; and a stem may be a

root. But they are not always the same thing. It is not possible to further break down the root; it either is or is not possible to further break down a stem, depending on whether the stem is also the simple root or whether other morphemes are also present, either free or bound. The word compound is usually reserved for words consisting of two roots put together; e.g., blackbird.

By way of example, the English word friends contains the stem friend, which also happens to be the root, as well as the affix (suffix) '-s.' The word friendships contains the stem friendship which is not a root, since it consists of two morphemes; it also contains the suffix '-s.' Though friendship is a complex form in that it contains a root and a derivational suffix, it is not technically a compound, as is the word blackbird, because the two elements are not full morphemes. Not all complex forms are compounds -- only those which contain at least two full morphemes. Inflection and derivation produce complex forms.

Thus the base which every Latin word must have is a root. It may not be a stem, because a stem could already contain some element other than the root. It may not be compound because a compound will contain more than one full morpheme. It may not be complex, because complex constructions have either inflectional or derivational suffixes added to roots or stems.

Inflectional suffixes are an outer layer of the structure of words; that is, no derivational suffix may appear appended onto an inflectional suffix. The only thing which may be appended to a form already showing an inflectional suffix is a post-final, a special class of suffixes in Latin, such as '-ne' and '-que.' Except for post-finals, whatever remains after the inflectional suffix has been removed will be either the root or the root plus other suffixes -- but derivational suffixes -- which we can call the stem.

Some Latin words will contain a base only; others will contain a base plus an inflectional suffix only. Still others may show a base with derivational suffixes; while yet another may show a base, plus derivational suffixes, plus an inflectional suffix, plus a post-final suffix. All depends on the particular word and its function in a larger construction.

As we saw when we looked at the structure of Swahili verb forms, the various elements of complex forms are not formed from elements at random. Particular ones are chosen, and they must appear in a definite order. The orders may not be confused or exchanged if meaningful words are to be produced. It makes a great deal of difference whether we say "He is going to town" or "He is inggo* to town"; the order of morphemes is rigidly determined in every language.

Let us set up a structural formula that will enable us to deal with any Latin word we may encounter. Using a device like this can well encourage new students to start at the very beginning in looking at words in a structural manner, rather than just as vocabulary items hard to remember and apparently fashioned at random by Romans long since departed.

±P±P±B±B±IS+B±DS±DS±DS±IS±IS±IS±PF

In this formula, let P stand for prefix; B, for base; DS, for derivational suffix; IS, for inflectional suffix; and PF, for a post-final suffix. The + between items implies that the item may be present; the − suggests that it may be missing.

Notice that any element may be either present or absent, save the base. It is always present. Every Latin word has a base. A word like et consists of the base alone. There is no suffix of any kind appended to it. A few examples follow.

Word	Base	DS	IS
vocēs	vocA		-e-, -s
fāmae	fāmĀ		-e
illud	illŌ		-d

These are relatively simple examples and yet they show several processes at the same time. It is probably best to start from the right end of a word and work toward the left. Do not start from the center and work toward one of the ends, or even from the first and work toward the end. This is definitely one time when it is best to begin at the end and work toward the beginning.

Before charting these and some other examples on the full table, let us note that we are again faced with the necessity of dealing with morphophonemic variations whenever they occur in Latin words. (Refer to the list of morphophonemic variations for Latin on p. 58.)

In working with words in this structural manner, it is sometimes necessary to make many false starts; moreover, it is usually advisable to work out the whole word, starting from the end, before entering it in the table.

± P ± P ± B ± B ± IS + B ± DS ± DS ± DS ± IS ± IS ± IS ± PF					
vocēs	vocĀ-	-ē-	-s	<	{-s[3]}
fāmae	fāmĀ-		-e	<	{-ius}
fāma	fāmĀ-		-ø	<	{-s[1]}
illud	illŌ-		-d	<	{-d}
corporibus	korpOS-		-ibus	<	{-bus}
corpus	korpOS-		-ø	<	{-d}
doceō	dokE-		-o	<	{-o}
agimus	agE-		-mus	<	{-mus}

± P	± P	± B	± B	± IS	+ B	± DS	± DS	± DS	± IS	± IS	± IS	± PF		
cape					kapI-						-e			
verbum					verbŌ-						-m	<	{-d}	
fortitūdinem					forti-			tūdINe-			-m	<	{-m}	
fortitūdō					forti-			tūdIN-			-ø	<	{-s^1}	

After supplying the remaining morphemes from which the final inflectional suffixes have been taken, let us look at some of the problems involved in setting up these items in such a way.

The first step to be taken is the mastery of all morphophonemic variations in Latin. This will be a great shortcut in all structural formulations of words. After a short time, this process becomes a habit and requires little attention. If not mastered first, it remains a source of great anxiety to everyone.

The first word vocēs shows a final inflectional suffix not at all difficult to locate. It was one of the first we discussed, the {-s^3} morpheme, or the one which indicates second person singular forms of the Latin verb. Since there is no post-final suffix (though there could be), this inflectional suffix is the outer layer of formation. It is preceded by the marker for the subjunctive in Latin verbs of the first conjugation, or those with stems in /-Ā-/. And it is precisely this stem which we show as the root. What happens to the /-Ā-/ in the form vocēs? Looking at our list of morphophonemic variations, we note that /A/ disappears before another vowel.

Looking at the entry illud, we note that we had good reason initially to designate the neuter nominative and accusative singular morpheme with {-d}. Here it appears in exactly that form. We may recall from our first attempt to set up structural formulas for Latin nouns that Latin /O/ appears as /u/ before {-d}, as well as before {-s^1} and {-m} -- thus illud and not illod*.

C. EXERCISES IN LEXICON

NOTES TO INSTRUCTOR

1. Let the participants do Exercises 1-7 by themselves. After they have worked 55 minutes, take a break of ten minutes, letting them discuss the matter among themselves if they wish. After reconvening put the material from one participant onto the board, explaining how each form represents a certain kind of morpheme in Latin.

2. Do Exercise 8 together, the instructor getting the material from volunteers and putting it on the board, letting the participants copy it down as they go. Take each step and explain all morphophonemic changes fully.

C. EXERCISES IN LEXICON

1. Take the remaining ten forms from the chart on pp. 112-13 and explain fully the breakdown. 10 minutes.

In the following exercises, you may use the dictionary.

2. List ten free morphemes in Latin. 5 minutes.

3. List ten bound morphemes in Latin. 10 minutes.

4. List ten empty morphemes in Latin. 5 minutes.

5. List ten full morphemes in Latin. 5 minutes.

6. List ten compounds of Latin. 10 minutes.

7. List ten complex forms of Latin. 10 minutes.

8. Working together with the instructor, make structural analyses of the following words, first working them out fully on paper and then entering them in a chart exactly as the one we just used. Give full explanations for each form you enter. Make a separate chart and explanation for each word. (This device, the separate chart, should be used only at first with your own students, as it gets to be finally more writing than learning, which is not the aim.) 60 minutes.

mors
habēns
autem
punīrī
rosārium
nāvigābile
aquārius

D. RECAPITULATION

In these six short sessions, we have tried to examine not so much a concise descriptive grammar of the Latin language as certain techniques of descriptive and structural linguistics that can be used both to provide such a descriptive grammar of Latin and to aid beginning students in looking at Latin from a structural point of view. In general, the techniques have been defined, or described, and then included in exercises to be done by the participants.

The aim of these sessions, however, does not end with imparting some modern linguistic devices to the participants, but rather it is hoped that some of the techniques learned here can be utilized from the beginning in the classrooms of the participants themselves. This need not be done in all the economic severity with which it has been done here, but in small though frequent amounts.

Young students are usually quite intrigued by the idea of the phoneme. A great deal of time spent on Latin pronunciation can be lifted from the realm of the tedious by introducing this idea to them at the very beginning of their instruction in Latin phonology. It makes the whole system of Latin sounds take on a certain cohesion and form, rather than appear to be some uncountable and enormous mass of foreign sounds that can at best be only approximated.

Again, a minimum amount of definitions should be presented: first, because they bore young students -- and older ones too sometimes; and second, because it is very difficult to define accurately basic terms in any discipline -- and linguistics is no exception.

An initial explanation as to the breakdown of language study into the components of phonology, morphology, syntax, and lexicon, with short introductions as to the nature of each, can give beginning students a panoramic view of the whole thing they are about to undertake, rather than let it remain a mystery of uncharted dimensions.

A good number of classroom exercises in which students and teacher together go about a search for minimal pairs will add to vocabulary in a rapid and painless fashion, as well as quickly introduce basic structural concepts.

Since morphology is the area of Latin study that causes the most work and problems, the opportunity here for setting up exercises in morphemic analysis should not be avoided. Let every kind of paradigm assignment be based on extraction of morphemes and their allomorphic variation. This greatly simplifies their concept of Latin morphology and gives the grammar a pattern that they will then find repeated over and over again.

Another benefit to the young student in a structural approach to Latin must be termed philosophical. He will not be so apt to harvest the useless collection of myths about language inferiority or language superiority. He will finally be not at all inclined to confuse style and accuracy, a distinction that has seldom made its way down to English classes, where complicated issues of English stylistics take the place of instruction in English grammar, leaving the students befuddled concerning both.

During the past decade many so-called structural grammars have appeared for several foreign languages. This has usually been a misnomer. Rather than structural grammars, they have been based on the endless and tiring method of sentence pattern drill. Certainly, there must be exercises showing what has been discovered and discussed, but relatively few will suffice. Constantly reminding students of the structural principles they have already learned as they read any new material will serve a much better purpose; this, in addition to pointing out and thoroughly studying all new structural material. Much of the unnecessary attention focused on pattern drills in foreign language learning has been based on the false assumption that we learn a foreign language in the same way we do our native tongue originally. Such is not the case. No matter what the method of introduction to a second -- or third or whatever -- language, we approach it with a fully developed language at our command. Any intellectual formulation that can be <u>simply</u> and <u>usefully</u> stated for the student taking up the new language stands head and shoulders above hours of meaningless repetition.

Try, then, in your own classrooms to introduce your students to these basic techniques we have looked at in these sessions. They will enliven your classes and provide your students with a vastly more entertaining approach to Latin, as well as a fundamental concept of its nature.